TELECOMMUNICATIONS AND UNDERDEVELOPMENT:

A POLICY ANALYSIS OF THE HISTORICAL ROLE OF CABLE AND WIRELESS IN THE CARIBBEAN

by

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To the memory of

My Mother

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ABSTRACT

The foundation structures for telecommunications in the English-speaking Caribbean were laid during the period of direct colonial control of the region by Britain. They formed part of the global communications network of a large empire requiring quick and efficient links with a remote imperial Centre. In this thesis, we argue, however, that the Caribbean component of this colonial telecommunications system was designed not just to improve imperial political administration of a distant and scattered region, but even more directly in support of a Nineteenth century drive for increased British private capital accumulation in Central and South America.

We indicate that in the process of penetrating the Caribbean territories, the early British multinational telegraph conglomerates received the direct financial and technical support of their British home government, in a meso-corporatist relationship designed to counter both United States and other European competition in the region. The company Cable and Wireless emerged, both as an end-product of this inter-imperialist competition, and as an attempt to rationalize the innovation of wireless telegraphy with the more established cable network interests.

Political de-colonization and the growth in the influence of the large colonial Dominions led to a fracturing of the symbiotic relationship between the private telegraph interests and the Imperial state. Nationalization of the industry, which followed, eventually led to more autonomous control by the Dominions over the telecommunications systems within their national territories. This marked the end of the empire-wide remit of the state-owned Cable and Wireless. But we argue that monopoly control over the telecommunications systems of the smaller, less powerful colonies, such as those in the Caribbean, was awarded to the diminished Cable and Wireless as a concession for its loss. However, despite close to three decades since the start of the process of political independence in the region, and early attempts by some governments to gain national control through equity acquisition, the dominance of Cable and Wireless continues to increase.

In the last decade, the increase in the company's dominance has been facilitated by Western multilateral lending agencies, particularly the International Monetary Fund (IMF), whose loan conditions and demands for privatization in the sector have mediated on the side of the entrenched multinational company, in the same way that the British imperial government mediated on its behalf during Colonialism. Rapid technology changes, telecommunications liberalization in the global centres as well as significant weaknesses in Caribbean national and regional policy planning have also worked to the advantage of the company's renewed policy of increased investment and greater control over Caribbean telecommunications decision-making.

INTRODUCTION

The early foundation structures for both telecommunications and mass communications in the English-speaking Caribbean were laid during a period of direct colonial control of the region by Britain. They formed part of the communications network of a global empire, requiring quick and efficient links with administrators, plantation owners, shipping and other outlying commercial and political interests. Naturally, the centre of this global communications infrastructure was London, the political headquarters of the imperial power of the day. The main visible actor in the extension of the network throughout the empire, including into the Caribbean colonies was not the British State, as might be expected, but a succession of private companies. These firms, however, operated in a close collaborative relationship with the state authority, which often provided both financial and technical support. In exchange for this support, the state often negotiated a role for itself in company policy and direction to ensure consistency with government and empire objectives.

Many of the former colonies have become politically independent within the last three decades. In this period, policy-makers have been confronted with entrenched institutional structures which were originally designed to fulfill the economic and political objectives of the external colonizing power. The decision-makers in many such ex-colonies are only now beginning to recognize that despite political independence, the fate of their peoples continue to be bound up with the non-state economic and institutional legacies bequeathed by 300 years of British rule.

This study examines the historical basis of the continued dominant role being played by one such major ex-colonial non-state actor in the monopoly ownership and control of the telecommunications resources in the english-speaking Caribbean. The telecommunications operator under examination is the British multinational corporation (MNC) Cable and Wireless PLC, which in 1989 operated a monopoly on the inland and overseas telecommunications services in nine Caribbean territories, and was a dominant partner in the network ownership of six others. We are interested here, in the historical processes which resulted in the company acquiring such a dominant position within the region, and the factors which are contributing not just to its maintenance but to its expansion within the region over the last decade.

To better understand the process, we examine the successive early corporate mergers which created the conglomerate now known as Cable and Wireless, and the critical relationship between the company and its British 'parent' State, including its transition into and out of formal public sector ownership. Our study traces the early extension of Britain's outwardly radiating colonial communications network into the 'West Indies' and the impact of de-colonization on the fortunes of the then nationalised company.

The later projection of its newly privatised corporate power onto the relatively small States in a fragmented and debt-ridden post-colonial Caribbean formed the basis of our field research in the Caribbean, complementing some of the primary historical data gathered. In all this, we note the pervasive influence of the company on decision-making in favour of existing structures and conventions in place of renewed regulatory policies and re-examined priorities.

In the historical analysis in PART 1, this study seeks to support the proposition that public government, in the form of the British Imperial State was consistently and actively the agent for the expansion and growth of private monopoly interests to positions of dominance in Caribbean telecommunications. We also argue that the structure and policies for telecommunications in the modern Caribbean have been determined by this colonial dominance. In further advancing this argument, PART 2 supports the proposition that the corporate policies of the early Cable and Wireless and its antecedent telegraph companies were the economic agents of British colonial policy. This policy, while permitting the autonomous development of telecommunications in the large dominions of the empire, consigned the smaller colonial territories to direct British corporate control. This historical pattern reflects itself in the continued dependence of Caribbean telecommunications on British capital, technology and management expertise from the formerly state-owned multinational company, Cable and Wireless PLC.

In the concluding PART 3, we argue further that where attempts were made by certain of the newly independent states of the region to gain greater control over their telecommunications services, such efforts were eroded by the demands and policies of western multilateral lending agencies such as the International Monetary Fund (IMF) and the World Bank. Declining commodity prices gave rise to increased indebtedness and acute foreign exchange crises. These events coincided with rapid changes in telecommunications technology requiring a major new wave of capital investment. In order to meet IMF-imposed foreign exchange criteria and qualify for further multilateral loans from the World Bank, the governments in the region's major economies were pressured into policies of divestment and sale of state-owned telecommunications facilities and operating companies to external investors.

We contend that the primary beneficiary of these policies, as with the policies of the British imperial state, was the external multinational company Cable and Wireless. Failure of regional governments to implement policies of collective bargaining and co-ordinated planning has worked to strengthen this external control. Finally we argue that the formulation of public telecommunications policy is often a secret process involving inputs from a close-knit group of bureaucratic, political and business elites, and that this approach, common to both imperial British and post-colonial Caribbean States, inhibits effective policy-making.

At the heart of our analysis are questions about the nature of and limits to corporate power within the modern global communications sector [Murdock 1982: 118]. While much of the related analyses in the past [Harris, 1977; Murdock and Golding, 1976; Schiller, 1979; Boyd-Barrett, 1980] have concentrated on the exercise of corporate power within the mass communication sector, our study seeks to examine the same phenonemon but within the telecommunications sphere in an underdeveloped region.

This approach is informed by the concern that as the advanced economies and multinational companies enhance their control over communications technologies and resources, there is a real danger that the underdeveloped countries of the global South will be forced into new forms of communication poverty. Studies concerning the gross inequalities in international news flow and in programme content from the North to the South now require re-examination to take into account the renewed capacity of telecommunications technologies to contribute to a widening of the communications gap both within Third World countries and regions, and between the industrialised world and the underdeveloped economies.

While telecommunications multinationals, such as Cable and Wireless, expand into new areas to satisfy the needs of their large corporate clients locally and abroad, the basic telecommunications infrastructure in households and rural areas in the Caribbean get increasingly less attention. Average penetration of basic telephone in the largest English-speaking

Caribbean territory, Jamaica, for example, stood at just 4 lines per 100 of population in 1989, compared with over 60 lines per 100 in the United Kingdom, where Cable and Wireless is based, and with 86 lines per 100 of population in the neighbouring United States. The trend indicated by these and other statistics presented, would suggest that the successive innovations in telecommunications technology have not yet had any significant impact on a majority of the region's urban households, and even much less so among remote rural populations in both the Caribbean, and interestingly, in the United Kingdom as well.

This tendency is consistent with the structuralist arguments of theorists such as Johan Galtung [1981: 81-94], Samir Amin [1990: 75-90], and Dos Santos [1970: 231] , who argue that there are gross disparities in distribution of global wealth and power between Centre and Periphery nations. Galtung, for example, argues further that within each nation are also 'centres' of development, and 'peripheries' of underdevelopment, consistent with the structure of the international order. In our conceptual framework in Chapter 1, we isolate and discuss these and other theoretical issues which are important in explaining the nature of imperialism and underdevelopment and their implications for our area of study.

Conceptually, we rely on a synthesis of the theories of imperialism, dependency, micro-corporatism and self-reliance. We argue that Caribbean telecommunications development has been conditioned by historical and structural factors which imposed severe limits on policy options during the colonial era and the first decade of independence. In this protracted era, the colonial telecommunications network, as with the peripheral economies as a whole, was operated to the prescriptions and benefit of the Centre. In this relationship, the imperial state performed a largely directive, corporatist role over the private companies which were empowered and often resourced to implement and profit from such policies. The early Cable and Wireless, which was an amalgamation of these smaller firms, was a direct inheritor of this policy of micro-corporatism, later even becoming directly state-owned.

We argue that these historical conditions, directly serving the interest of the colonial Centre, remained largely unchanged in the smaller, newly independent Caribbean states, where the policies were mediated by privately-owned multinational corporations, mainly the modern Cable and Wireless (West Indies) Limited. However, in the larger independent regional territories, where post-independence changes in ownership were introduced, the dominance of the ex-colonial Centre was re-asserted in the 1980s as a result of three principal related factors.

These included the rapid technological changes in the sector, which over-extended the financial and technical capacity of the region, in the context of existing conditions. Secondly the interventionist role of the western multilateral agencies, namely the International Monetary Fund (IMF) and the World Bank, mediated on the side of the industrialised western economies.

These agencies ensured policies of divestment and sale of state telecommunications holdings which in practice, were acquired by investors from the industrialised countries, such as the United Kingdom-based Cable and Wireless with both the necessary financial resources and an entrenched dominant position in the region's telecommunications sector. The third factor was the internal weaknesses in policy-formulation and co-ordination, which together with secrecy in decision-making, limited the extent of regional joint bargaining and public participation towards Caribbean-oriented policy planning.

THE POLICY ENVIRONMENT

To what extent was this situation of re-inforced external dominance attributable to the failings of indigenous state and private sector interests in the region? In considering these issues, it is necessary to clarify here our understanding of the policy and decision-making processes, in light of the current debate.

According to Herbert Simon, the process leading up to the making of a policy decision involves the identification of goals. Simon emphasises that the stage of setting clear objectives is fundamental in giving purpose to administrative behaviour. The policy process itself is concerned with the selection from among a range of alternatives the course of action best suited towards achieving the stated goals.[1945 :5]. However, according to Rist [1985 :32], goal identification, like 'policy style', can be fraught with difficulties derived from 'the sectorization of policy-making', in which "each policy area develops into a semi-watertight compartment, ruled by its own 'policy elite'". This is the preliminary scenario faced in policy-making at the national level in Caribbean telecommunications, where separate 'policy elites' were in operation, presiding over departmental 'policy networks' or discrete 'policy communities' for domestic and for overseas services [Brown 1984: 9]. At the regional level, the policy framework is further complicated by the existence in each territory of its own group of national operating companies.

Difficult as the intra-regional fragmentation appears to be, however, the more fundamental difference, is between such regionally-based policy communities on the one hand, and, on the other, the foreign multinational policy network represented by Cable and Wireless. While policy goals of these communities can converge within the framework of the existing Caribbean Community (CARICOM) structure, the profit maximization imperative of the multinational corporation, can create a bifurcation of objectives when counterposed to local or regional policy goals such as 'universal service'. In such circumstances where both values and major objectives are likely to differ, the difficulty is determining whose values and objectives are to be used in the decision-making process [Simon 1945 :76]. Similar conflicts arise in the second phase of policy-making identified by Simon. Where goals have somehow been determined, the process of agenda-setting requires an identification of the available rational options and the selection of alternatives "which are conducive to the achievement of...previously selected goals." [1945: 5].

The decision-making process described in these terms by Herbert Simon are founded on the concept of rationality, in which options and consequences are comprehensively evaluated before action or implementation takes place. Policy-making in the Caribbean telecommunications sector, where it exists at all, is far removed from this paradigm, which many theorists argue is unrealistic. According to Charles Lindblom, the rational approach, while prescriptive of an ideal course of action, fails to describe the process of organizational decision-making in practice. Lindblom [1964: 157] postulates instead, that decision-making proceeds through successive limited comparisons, in which both facts and values, as well as the means and consequences are considered on a more limited scale, simultaneously.

Lindblom discussed the approach in terms of focussing on what is immediately wrong: 'remediality', rather than what might be right in the future: 'seriality'. "Policy-making is typically a never ending process of successive steps in which continual nibbling is a substitute for a good bite." Policy planning is projected, not on a second review, but "on a third or fourth of an endless series." [Lindblom 1965: 25]. This system of disjointed incrementalism, he argues, is better adapted to the diversity of situations in which policy problems may arise, because it takes more into account human deficiencies, inadequacy of information, cost limitation in the policy process, and other constraining factors.

This approach, also described as 'muddling through', allows for mid-stream correction of errors since changes of existing policies are minimal at each stage. Like Dror, however, we view the incrementalist approach as insufficiently pro-active in radically altering entrenched policies which have developed extensive loyalties and support systems over the years. In the Caribbean, where Cable and Wireless and its British colonial benefactors have been the dominant policy actors for over a hundred years, incremental changes alone would be ineffectual in the re-ordering of both objectives and priorities for policy implementation in the post colonial era.

According to Dror, incrementalism favours conservatism and the status quo by skillfully acting "as an ideological re-inforcement of the pro-inertia and anti-innovation forces." [1964: 153]. While it could be a satisfactory strategy in circumstances of broad concensus and policy continuity, where such conditions do not prevail and where a society is seeking to bring about significant social changes, then incrementalism, according to Dror, will not be appropriate [Ham and Hill 1984: 85].

Dror, like Etzioni [1967: 385-389] and Simon [1945: 19], seeks an alternative approach between the idealistic demands of comprehensive rationality and the other extreme of ill-considered and often futile spontaneity in policy formulation. Dror suggests a combination of rational and extra-rational methods, including group brain-storming sessions as well as creative and novel approaches based on judgement. Simon's later adjustment in favour of 'bounded rationality' or 'satisficing' goes some way in acknowledging the practical limitations of comprehensive rationality. It no longer seeks to maximize all possible values, but only those regarded by the policy-maker as satisfactory for attaining the policy objectives.

However, this approach, although an improvement on comprehensive rationality, is regarded as nonetheless, still quite demanding of the policy-process. Instead, Etzioni favours the breakdown of decisions into categories of fundamental decisions and incremental decisions [1967: 387]. In Etzioni's model of 'mixed scanning', fundamental decisions would determine overall policy directions, while less critical judgements could be made or adjusted during implementation. It offers scope for radical changes in direction and fundemantal objectives, while permitting some flexibility in implementation.

Etzioni's approach appears to provide a more useful and adaptable approach to decision-making in the Caribbean telecommunications policy environment. It would permit, for example, the determination of fundamental telecommunications policy and regulation to take place at a regional level, while allowing scope for modifications and incremental changes to take account of circumstances at national or operating company level, as well as during implementation. However, the mixed scanning approach of Etzioni is not in itself unproblematic. Regional fragmentation among agencies could limit the scope for such two-tiered decision-making unless a well-structured co-ordinating institution is established. While this would appear to create a financial strain in already over-extended national budgets, the savings from ill-considered and narrow national decision-making could substantially compensate. Another difficulty with Etzioni's 'mixed scanning' is that the distinction between fundamental and other decisions is not always self-evident and could be controversial. Consequently, we would endorse the views of Ham and Hill that it would "seem important to specify criteria for distinguishing the two types of decisions." [Ham and Hill 1984: 87].

The significance of addressing the mechanisms for regional decision-making and policy formulation arises because existing piece-meal approaches are proving unsuccessful as a response to the well co-ordinated approach by the dominant external corporation, Cable and Wireless. While the 'muddling through' method may seem less expensive, it creates, in the long run, an inadequate overall perspective, which is required for long term bargaining and technology planning with external interests. Incremental changes, in these circumstances, may not always be appropriate to redress a century-old consolidation process by existing structures.

MULTIDISCIPLINARY APPROACH

In examining Cable and Wireless as a modern multinational company operating in this policy environment, we need the benefit of a multi-disciplinary approach. Our theoretical discussions have therefore drawn on the disciplines of economics, political science, history and sociology to help in defining some of the questions not susceptible to single-discipline treatment. Economic analysis is required, for example, in discussing the role of MNCs in the global economy. But because the company was for over half a century a State monopoly enterprise, we also require the benefit of both political science and business history disciplines to understand its interaction with the State and the effect of this relationship on early telecommunications in the smaller colonies such as those of the Caribbean.

This interdisciplinary approach is advocated by Thomas Dye, who relates it to the concept of 'policy analysis'. Dye notes that the use of concepts from a wide range of disciplines contributes a wider breadth of experience to the process of analysis, and to the tackling, of social problems. He regards this interdisciplinary approach as capable of assisting public policy-makers to "improve the quality of public policy"[1976: 108], and is one of the characteristics which distinguish Policy Analysis from the related but narrower field of political science.

According to Harold Lasswell [1951], an early exponent of Policy Analysis, the approach involves the development of knowledge about the policy process itself, and the improvement of information available to policy-makers. This process, according to Lasswell aims at examining "the fundamental problem of man in society" [1951: 8], and "the realization of human dignity in theory and in fact" [1951:15]. These processes, as Christopher Hill and Michael Ham [1984:5] point out, involve both a descriptive and a prescriptive role for policy analysis. Put even more succinctly, it covers both analysis OF policy and analysis FOR policy [Gordon, Lewis, Young 1977 in Ham and Hill, 1984:4].

While the preponderant emphasis of this study is on the analytical and descriptive aspects of the social issues under examination, our reference to 'role' implies a concern with the consequences of the extant order and an interest in alternative institutions and strategies. As a result, in the later stages of this study we offer a brief discussion on some elements of an alternative strategy.

In defining Policy Analysis, Dye moreso than Lasswell identifies it with the decision-making of State authorities. "Policy Analysis is finding out what governments do, why they do it and what difference it makes" [Dye 1976:1]. While this emphasis by Dye on state decision-making accords well with the traditionally strong role played by the State in policy-making, some contributors to the more recent theoretical debate on the state have begun to call into question its centrality to the resolution of major social problems which have their root in international and transnational structures. In the current era of acceleration of globalization processes, it is argued, national decision-making and sovereignty are becoming less fundamental. We take up this debate on interdependency in the context of a discussion on the state presented in the initial chapter.

It is hoped that this study will contribute, particularly from the historical data, to a more comprehensive understanding of the early policy-making processes which have resulted in the present configuration of Caribbean telecommunications structures, institutions and policies. Our attempts to examine in some detail the background, growth and current scope, of the penetration by Cable and Wireless into the region's economic life, aims at helping to clarify the ways in which current decisions about regional telecommunications are taken and how these implied policies are translated into action.

A legitimate question in this context is why focus our analysis on the role of a single non-state actor within the region. The informed assessment of a Caribbean-based German communications specialist, Kristian Knaack, provides a concise response: "If we talk about telecommunications technologies and and policies in the Caribbean, we talk Cable and Wireless." Reference has already been made to the overwhelming dominance of the company in the ownership and control of both the overseas and domestic networks in the region. "On the whole", remarks Knaack "Cable and Wireless has a monopoly in the Caribbean" in circumstances where the company's interest, as a profit-oriented corporation, is not identical with the development goals of

Caribbean planners [Kristian Knaack in 'Trincom 89' Report, 1989: 39-40].

Our policy analysis, therefore, appropriately places the focus on this major policy actor in its interaction with the regional and British states. In the context of a synthesis of existing theories, we aim to enhance our knowledge of the corporate issues impinging on the policy process itself. By also examining the Caribbean telecommunications policy environment both historically and in contemporary terms, our study seeks to raise important issues concerning the relationships between the state, society and the international corporate community in the sphere of telecommunications. Among the issues which we hope will be posed by this study are the questions of whose policies are formulated under the present regime, how these policies emerged, and in whose interest are they translated into action.

While the geographical context of this research study is the Caribbean, and much of the analysis relies on data from this region, many of the conclusions are not atypical of the general situation facing other under-developed ex-colonial societies in the so called Third World. The case of the English-speaking Caribbean may well be closely analagous to the situation in other underdeveloped regions which were similarly dominated by a single telecommunications multinational company or which fell within the sphere of influence of the former British colonial empire.

As with most research into corporate activities and state policies, the analysis is constrained by access to the relevant data. In the case of Cable and Wireless, we have benefitted from their co-operation in the supply of mainly officially published historical, financial and policy statements. Additional and sometimes more penetrating accounts have come from interviews and examination of public records, both in the United Kingdom and in the Caribbean. A more detailed account of these sources is provided.

ORGANIZATION OF SECTIONS

Having discussed in the foregoing introductory section the nature of the research problem, and our approach to tackling it, we now set out the manner in which the material is organised in the study.

In PART 1, consisting of Chapters 1 to 3, we examine the imperialist state and its role in Caribbean telecommunications and economic underdevelopment. PART 2, comprising Chapters 4 to 7, looks at the activities of Cable and Wireless and its antecedent private companies, in creating the colonial communications network of which the Caribbean formed a part. It links into the previous section by examining the dynamic interaction between the corporate profit motive and the political objectives of the sponsoring parent state. The concluding PART 3, embracing Chapters 8 and 9, is dedicated to an examination of both state and corporate influences on telecommunications in the modern Caribbean, and an analysis of the strategies employed to achieve control.

While there is some historical progression to the study, we reject a chronological approach to chapter structure in favour of relevant themes being drawn from the historical or other data, and discussed in relation to the specific topic of our investigation.

CHAPTER STRUCTURE

Chapter 1 introduces some of the core issues of our study with a theoretical discussion of Imperialism, the State and Under-development. Marxist and non-marxist perspectives of imperialism are brought to bear on the role of the British imperial state in promoting the commercial exploitation of its colonial empire in the nineteenth century. A micro-corporatist approach is held as a powerful contributor to the capacity of the then existing private enterprise to penetrate and retain markets within the colonial empire. This entrenched control forms the basis of the situation of structural dependency existing in ex-colonial peripheries such as the Caribbean. But while this is regarded as a very important factor in molding the character of current regional communications policies and structures, the significance of internal political factors is also highlighted.

The theoretical problems and issues raised in the previous chapter are immediately followed up in Chapter 2, which presents a socio-political overview of the Caribbean Region as the context in which the policy analysis is located. The issues of external control and internal political fragmentation arise as central factors in our analysis of the social and economic problems facing the region. The rise in external debt has implications for the resources which can be allocated to telecommunications in the harsh fiscal environment of under-development. One result is greater dependence on both multilateral lending agencies and foreign direct investment which, acting together with the industrialised countries, give rise to questions of renewed imperialism. These issues are explored in their international and regional contexts.

In Chapter 3, we present and discuss the research data on the penetration of British colonial telecommunications infra-structure into the Caribbean region, and the subsequent role of Cable and Wireless itself in the refinement of these so-called "Tentacles of Progress" [Headrick:1988] based on the political requirements of the British state. The particular importance of this chapter to our study is the foundation it establishes for our subsequent conclusion that the configuration of the region's modern telecommunication system conforms in large measure to the infrastructure of dependency laid down in the Caribbean colonies of the nineteenth century.

The next chapter marks the start of PART 2 dealing with the historical development of Cable and Wireless and its dual role as an agent both of its own economic aims and of the political objectives of its parent state. To begin with, Chapter 4 consists of a literature review and analysis of the role of multinationals both in communications and in the wider global economy. Here we argue that the foreign and economic policies of industrialised countries, collectively expressed through multilateral lending agencies such as the International Monetary Fund (IMF), often provide additional advantages to MNCs. IMF demands for government divestment and privatization of telecommunications systems in the underdeveloped south, for example are likely to operate in the interest of large external carriers such as Cable and Wireless, which are frequently the only entities with the necessary resources to acquire the nationalised firms and industries.

In Chapters 5 and 6 we present and discuss historical data on the early development of private cable telegraph firms, the emergence of wireless as a competitor to cable and the eventual merger of these enterprises into the multinational corporation we now know as Cable and Wireless. The early resistance of both the British state and the cable conglomerates to competition whether in technological terms from Marconi's wireless, or from the route diversity schemes of the Pacific Cable Board, reflect the difficulty of shifting established alliances in the interest of new innovations and decentralised control. Demands for increased self-government by the larger colonies contributed to the pace of change. But in the process, the less powerful colonies such as Hong Kong and those in the Caribbean, became the complimentary prize for a company stripped of its home base and of its larger client states in the first wave of British decolonization.

Chapter 7 concludes PART 2 with a presentation of data profiling the Modern Cable and Wireless in the decade following privatization in 1981. Unfettered from the pursuit of the explicit political goals of its former owners in government, the company's new global strategies resulted in dramatic expansion and an unbroken record of profitability. But, as we point out, its growth continues to be built on the foundations of over a century of patronage from the British imperial state and from the policies of western funding agencies.

The rise of Cable and Wireless PLC as a new corporate giant coincided with the post-colonial economic decline and indebtedness of many partner governments in the Caribbean and elsewhere. In Chapter 8, the start of PART 3, we begin with an analysis of the role of Telecommunications in National Development. While telecommunications is not regarded as a panacea to structurally rooted socio-economic problems of the region, greater resource allocation, policy planning and regulatory reforms are seen as essential to fulfill its developmental potential. Counterposed to this analysis is an overview of the renewed profit-generating infrastructure of Cable and Wireless in the region. We document and evaluate this reinforced dominance. Our examination of both the national and regional responses again suggest weaknesses in policy-making structures, the absence of regulatory reform and of adequate collective approaches to technology transfer, negotiations and service delivery.

Chapter 9 provides a concluding analysis, bringing together some of the contemporary policy implications of the historical process outlined in the study. We relate these assessments to the theoretical issues raised earlier, including consideration of the disparity in the flow of benefits from the existing order. Issues of sovereignty, interdependence and future regional co-operation are also discussed.

PART 1

IMPERIALISM AND EARLY CARIBBEAN TELECOMMUNICATIONS

CHAPTER 1

IMPERIALISM, THE STATE AND UNDERDEVELOPMENT

In this chapter, we explore some of the analytical concepts which can assist in an understanding of the role of the British imperial state in the expansion of the colonial telegraph network. It is this early network of private firms which merged and later became the multinational corporation known today as Cable and Wireless. In this process of expansion and corporate consolidation, the British imperial government also performed a key function. We argue that under historical conditions of mature capitalism, the role of the British state was transformed from one which was supportive of the process of capital accumulation to one of directing that process [Cawson 1985:6]. In the area of telecommunications in the early nineteenth century, the British government's intermediation of the diverse interests of a range of telegraph companies became, by the closing decades of that century, a relationship of corporatist control of a large scale powerful multinational conglomerate.

The corporatist relationship between the multinational company and the British state reflected itself abroad in the form of imperialism and cartelization. In this scenario, the state exerted control over the policy direction of its major conglomerates, which in turn supported the political and military objectives of the government. We counterpose this powerful joint external dominance by the state and conglomerate with the divided and exploited circumstances of the colonial territories into which they had expanded both politically and economically. The ideas of structuralists from the dependency school as well as other theorists such as Johan Galtung, are employed to explain these global relationships of a dominant centre and a corresponding underdeveloped periphery. These theorists also provide the basis to understand the correspondence of interest between the developed urban centres and the relatively underdeveloped rural sectors in both the industrialised and 'Third World' economies.

The ideas of the dependency school are regarded, however, as inadequate to explain the processes and relationships within the periphery itself. A synthesis is therefore explored between the global framework of the dependentistas and the explanations of internal dynamics provided both by the marxist school and by neo-realists such as Stephen Krasner. A resolution of the development dilemma of these dependent economies is addressed in a discussion of the concept of collective self-reliance.

Discussed in their broader policy implications, these ideas are also applied to the structure of the relationship between the the telecommunications networks of many small underdeveloped territories, such as those in the Caribbean, and the large privately owned carriers, epitomised by the Cable and Wireless monopoly in the Caribbean region.

1.1 - THEORIES OF THE STATE

In beginning this overall discussion, we take as our first point of departure an analysis of some of the leading theories of the state as they relate to the Caribbean and Britain through important transitions in their relationships.

1.1.1 - The Marxist Model

"In any analysis of imperialism, the actions of capitalist states must play an important role." [Brewer 1980: 14]. According to Brewer, the ideas of Marx on the subject, though not regarded as 'holy writ', have proved very fruitful. In the Marxist model of the capitalist state, power is derived from the ownership of economic resources. In their well known declaration in the Communist Manifesto, Marx and Engels regarded "the executive of the modern state", as "but a committee for managing the common affairs of the whole bourgeoisie." [Marx 1977:223]. The Marxist perspective flowing from this idea, argues that the role of the state under capitalism is to facilitate the process of capital accumulation and profit generation by a dominant economic class.

In this approach, the wealthy 'ruling class' acts to preserve the broad framework of the existing social order, using its economic power, ideology and organization to control the parliamentary, bureaucratic, military, communications and other personnel within the different branches of the state apparatus. Lenin, advancing the ideas of Marx, argued that the capitalist state functioned not only as the domestic tool of finance capital and monopolies, but also as the advance guard for the global expansion of capitalism. Writing in the spring of 1916, Lenin observed: "The latest period of capitalism shows us that definite relations are being established among capitalist groups, relations based on the economic partition of the world; whilst parallel with this fact and in connection with it, definite relations are being established between political groups, between States, on the basis of the territorial division of the world, of the struggle for colonies, of the 'struggle for economic territory'."[Lenin 1917: 86]

These observations of Lenin find direct reflections in the activities of Cable and Wireless and and the British government in the wider Latin American region during the first half of the 20th century. A secret report, commissioned by the British Board of Trade in 1944, entitled 'A Survey of International Cartels' reveals the undeclared but supportive role of the British imperial state in what it called 'private international industrial agreements'. The report estimated that in the manufacturing sector alone, products covered by international cartel arrangements represented some 34% of total British manufacturing output in 1938 [Board of Trade Survey, 1944: XX111].

Cartelization activity in the telecommunications industry was discussed in some detail in the report: "In October, 1921, the four great telegraph companies of the world, Marconi's Wireless Telegraph Company, Ltd of London, the Gesellshaft fuer Drahtlose Telegraphic of Berlin, Compagnie Generale de Telegraphie sans Fil of Paris and RCA of New York entered into an agreement to eliminate competition between their telecommunication interests in Argentine, Brazil and Chile. Under the agreement, each company appointed two trustees (and the U.S. company a third to act as chairman) to whom the companies transferred the interests in the South American countries. fur Drahtlose Telegraphie, G.m.b.h., and as a result of mergers, Cable and Wireless Ltd. has become substituted for Marconi's for all the purposes of the agreement. The Trustees for Cable and Wireless (in which HMG {Her Majesty's Government} hold shares), are Lord Inverforth and Sir Edward Wilshaw." [Board of Trade Survey, 1944: 49].

The document indicates conclusively not only the existence within the global telecommunications sector of the cartelization process of which Lenin spoke, but also the active involvement of European and American capitalist governments in the establishment as well as the maintenance of such agreements. As the following further extract shows, the joint state/company role in the cartel arrangements was not just to secure market share against international new-comers to the sector. Using the explanation of the exigencies of wartime, the continued state role was also directed against the emergence of any internal competition within the target countries or independent choice of investment partner: "On the 21st of January, 1940, the T/E Department {Trading with the Enemy Department} authorised the British Trustees to continue the old arrangement 'so far as practicable and desirable' on condition that all communications relating thereto were submitted to the Department for prior approval. There was a danger that, if this was not done, the Germans would enter into independent arrangements with the South American Governments, and co-operate in setting up 'national' companies which would squeeze out those controlled by the trustees. The ... F.O. {Foreign Office} concurred in the licence, and the U.S. Government have apparently permitted the American company to continue on the same basis." [Board of Trade Survey, 1944: 49].

In a perceptive evaluation of these global activities of imperialism, Lenin commented: "We see plainly here how private monopolies and State monopolies are bound-up together in the age of finance capital, both being only differing stages in the imperialist struggle between the largest monopolists for the division of the world." [Lenin 1917: 82]. If the wider interest of British capitalism was to be promoted in Latin America, the British state would have to compete successfully with the expanding influence of German and American capitalism.To ensure this, Britain, as well as the other states, felt the need to support the establishment and later direct the operation of capitalist cartels within the telecommunications sector.

In emphasising the 'essentially capitalist role fulfilled by the state', Samir Amin notes that it is not only dominated, but also motivated by the ideology of capitalism. He argues that the capitalist state slavishly imitates the organizational, administrative and educational forms of capitalism. When imbued with a high degree of consciousness, "it seeks to incorporate into the reality the criteria of capitalist rationality (efficiency, productivity, profitability)."[Amin 1990: 167].

This characterization of the behaviour of the capitalist state refers most relevantly to the institutions of government in developed capitalist economies such as in Britain. But if the state in this context is an imitation of capitalist values and practices, then the state in the largely un-reconstructed colonial peripheries such as much of the Caribbean could also be seen as predominantly patterned and motivated by capitalist ideology. This is because, taking the example of Jamaica, "the institutions, structures and legal practices of the Jamaican system - as indeed of the other British Caribbean countries - are theoretically based on patterns and forms transplanted from Great Britain in the form of the Westminster-Whitehall heritage." [Jones and Mills 1989: 106].

In such a situation, according to Amin, "it is then possible to understand why, when the real social base of this capitalist power is weak (or non-existent), the capitalist power is unsure whom it is serving or should serve. In these circumstances it can slide under the prongs of compradorization, turning the local state into an extension of the dominant worldwide capitalist power." [1990:168]. This, we argue here, is the process underway within the Caribbean, mediated by the financial lending agencies of the capitalist west.

In his variant on the Marxist state model, Miliband maintains that far from being a neutral agent, as claimed by pluralism, the state is a tool of the wealthy corporations and powerful economic classes operating within society [1969: 14-15]. However, in the case of Caribbean societies, the significant corporations and powerful economic classes operating within the economy were externally based multinationals and their governmental representatives within the International Monetary Fund and the World Bank.

Referring to the case of Jamaica, the largest economy in the English-speaking Caribbean, Thomas notes that foreign ownership of major sectors of the economy was extensive: "mining 100 per cent; manufacturing 75 per cent; financial services 66 per cent; transport 66 per cent; communications, storage, services all exceed 50 per cent and sugar 40 per cent. The Jamaican bourgeoisie, already small in numbers, was linked together by family ties - with their associated dynastic traits. As a class, however, in economic terms, they were subordinate to North American and British capital." [Thomas 1989: 291].

While allowing that the state may exercise some autonomy from these dominant economic class interests, Miliband advances three reasons for his class characterization of the state. The dominant economic class, the bourgeoisie, usually shares the same class background as the leaders of the state bureaucracy, military, judiciary and other institutions. Secondly, he argues that this ruling economic class is able to consistently influence the state through its organizations and personal contacts. Thirdly, Miliband contends that the very survival of the state under capitalism is objectively dependent upon the economic base and support created by the bourgeoisie [1969: 49-55]. Although later revising this position to place more emphasis on the state's selective autonomy from the bourgeoisie [1977:73-74], he maintains that the state remains a principal agent for the continued dominance of the wealthy classes.

Poulantzas contributes to the debate on this model the view that the dominating influence of the bourgeoisie on the state is not a uniform and monolithic class input. He argues that this is because the bourgeoisie is not a uniform and monolithic class but one which contains within it a varied range of sub-interests and groups. These internal variations within the dominant class enable the state "to intervene against the long term economic interest of one or other fraction of the dominant class.." [Poulantzas 1973:285].

The implication of this view (and that of Miliband) is that over time, the state may act in the interest of foreign capital, or in the interest of the local capitalists "depending on the concrete conjuncture" [Poulantzas 1973: 285]. In this scenario, we would argue that the reality within small under-developed countries is that the dominant interest would usually, though not always, be the large externally-based corporations. Both their relative economic strength compared to that of even the state itself, and the influence of their home governments and associated multilateral benefactors such as the IMF, ensure a positive response by the local state to a foreign corporate agenda.

In emphasising the influential, often decisive role of a capitalist ruling class on the decision-making and policies of the state, marxist theory also underlines the absence or gross under-representation in state policy-making, of the interest of the working or unemployed mass of the population. Applied to the conditions in the global south, the implication of this analysis is a class structure, at the top of which is the powerful foreign capitalists, supported by some elements of the local beourgeoisie, with the working class and unemployed masses at the very bottom. And the relative influence on the state's day to day policy-making would occur in that order of priority. Amin, however, does not regard this foreign dominance of the state as insurmountable. "Under popular and national pressure, it could also try to refuse this surrender and seek rather to build an autonomous state, bourgeois, in that it is founded on the ideology of capitalist rationality, but without the real bourgeois social support that transmits the rationality." [Amin

1990: 168].

Interpretations of the prescriptive implications of the Marxist model vary widely. However, at its most elementary, it involves a radical re-structuring of the ownership of the economic resources, and hence the values and 'super-structure' of the society, including the state. Amin sees 'a central role for the state in the conduct of 'development' in the developed and underdeveloped capitalist countries. He acknowledges such an approach as a "rejection of the 'anti-state' ideological propositions of conservative liberalism," which "are running the wind in the West."[Amin 1990; 168-169.]

Synopsis

An important strength of the analysis offered by Marxism is its explicit identification of an economic motive as the primary basis for the collaboration between the capitalist state and the associated multinational companies. The capture of overseas markets and raw materials is represented as the central objective underlying the politico-military conquest of colonies. It reveals the involvement of capitalist governments in a competition for territorial control as part of the inter-capitalist struggle for markets which took the form of cartels in the late 18th and early 19th centuries. We have shown the involvement of both Cable and Wireless and the British government in this process, which would appear to support the marxist analysis that the capitalist state acts primarily in support and defence of the dominant capitalist class, or the fraction within it which happens to be in the ascendency.

In line with Samir Amin, however, we argue that within the ex-colonial capitalist economies, such as those in the Caribbean, the influence of the local capitalist class on the state is subordinate to that of foreign capital, whose entry into the economies of the former colonies has been a primary function of the imperial state. The entry of multinational companies such as Cable and Wireless was initially facilitated through the intermediation of Britain, the colonizing power. However, in the post-colonial period, the consolidation of such external multinational companies has depended more on the indirect support of capitalist multilateral lending agencies such as the International Monetary Fund (IMF) and the World Bank, than through the direct intervention of their home governments.

1.1.2 - Pluralism and Interdependence

While Marxist conceptions of the state have been concerned with 'ruling class' control of the economic infrastructure, the pluralist approach has offered notions of a more diverse influence on the state. Early exponents of pluralism, such as Schumpeter, associate the functions of the state with promoting democracy, which he regarded as "that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote" [Schumpeter 1947:269].

This emphasis on electoral competition forms part of a pluralist assumption of popular participation, which is often more imagined than real. Commenting on the perceived democracy which forms much of the basis of modern pluralism, Parenti [1983] notes that "elections and political party competitions" are not the sure tests of democracy as they are often portrayed to be. "Some two party or multi-party systems are so thoroughly controlled by like minded elites that they discourage broad participation and offer policies that serve establishment interests no matter who is elected." [Parenti:1983:59].

In more recent times, other pluralists have argued that state power in a western capitalist society is distributed among a wide range of competing groups. Each group is capable of influencing the decision-making carried out in state institutions. A broad spread of influences are brought to bear on public policy-making because different interests are active around different issues. The leading modern exponent of this view, Robert Dahl, [1961] argues that in this mix, government agencies are one set of pressure groups among the rest, and that as such government both pursues its own interest and responds to demands coming from outside of it. Still other perspectives on pluralism see the state as an independent arbiter, defending the 'public interest' against undue influence by any single sector or class in society [Truman 1951:508, Birch 1964: 236].

The interdependency school within pluralism constitutes an increasingly important perspective. Keohane and Nye [1981: 121-129] visualize a pluralist approach to international relations in which multiple sectors interact with each other across national borders. Issues of political sovereignty and national defence, in this approach, are subordinated to economic factors. Priority is placed on global economic progress, particularly through the instrumentality of non-state actors such as multinational corporations. Transborder economic development is regarded as dependent more on the free international interaction of such non-state actors than on the pursuit of national policies and regulatory controls.

One radical exponent of this view sees a very dim future for the nation state:

> "the fundamental problem of the future is the conflict between the political forces of nationalism and the economic forces pressing for world integration. This conflict currently appears as one between the national government and the international corporation, in which the balance of power at least superficially appears to lie on the side of the national government. But in the longer run, economic factors are likely to predominate over political..." [Johnson 1981:400]

This approach to inter-dependence, described by Vernon [1971: 112] as the 'sovereignty-at-bay' model, counterposes national policy-making to global trans-governmental policies, the motive force of which is the multinational corporation. Under this model, development is achieved through the goodwill of dominant multinationals, voluntary capital investment and technological transfers to underdeveloped countries, and through rigorous free trade. Interdependence can even imply the end of nationality and national governments, and, as Johnson puts it, the ultimate emergence of "a world federal government...as the only rational method for coping with the world's economic problems." [Johnson 1981: 400]

The interpretation placed on this theory determines how useful it can be for the process of communications policy analysis. At its most generic, interdependence appears to address the pluralist goal of mutual co-operation among countries of all types towards the peaceful, even if not smooth, functioning of the international system. In communications terms, this approach would take advantage of the liberal tradition of international dialogue for solving such problematic issues as trans-border data and information flows, shared use of the electro-magnetic spectrum and allocation of geo-synchronous orbital positions. It recognises and seeks to redress, within the system, the dominant role of multi-national corporations in the marketing of telecommunications services and equipment and in the distribution of news and media programmes. This conception of inderdependency operates within the framework of international institutions whose memberships are based on nation-states exercising in principle, the right to self-determination and equality.

On the other hand, Johnson's more extreme approach to interdependency implies an abandonment of national sovereignty, regulation and policy planning in favour of the free flow of capital and services. It envisages an involuntary surrender to foreign capital and global influences: the position earlier rejected by Amin [1990:168]. Such an approach to interdependence legitimises the role of the technologically more advanced countries and their multinationals as natural leaders in a world where the so-called tide of economic growth will lift all boats. It also ignores the role of internal factors such as class, indigenous creativity and national culture.

In defending a more responsive approach to interdependence, Hamelink argues that while there will always remain scope for activities within 'the interstate arena', more account needs to be taken of 'the numerous non-state actors that had become essential forces in international politics.' His conception of these forces go beyond multinational corporations and the economic realm, to include worldwide voluntary non-governmental and social organizations. In reviewing the strategies which could be employed in the struggle for a New World Information Order in the 1990s, Hamelink rejects as counterproductive, the whole-scale reliance which he feels was placed on the state-centric model, during the previous two decades:

> "A critical problem with the concept of national sovereignty as a central category to the 1970s debate is the fact that it is firmly rooted in the 'realist'

paradigm of international relations. It conceives the world as a state-centric system, and in extending nation-state based power politics to the inter-state arena, aspires to the maintenance of the status-quo, or maximally to system reform rather than to fundamental transformation of world society. The 1970s debate on a new international information order was seriously impaired by its exclusive reliance on this state-centric paradigm. This incapacitated the debate to search for solutions to cross-border communication problems that transcended the existing system and to take serious account of the numerous non-state actors that had become essential forces in international politics." [Hamelink 1990: 1-2]

Hamelink is here searching for an adequate interdependency framework capable of counter-balancing the dominant global role of the private capitalist corporations and institutions. He correctly recognises that the nation-state had failed to fulfill this function in a global environment where "basic issues of international communication have to be analysed against the background of social processes that are most adequately described as 'globalization' processes".

An important problem which an uncritical globalist approach encounters is its seeming neglect of the internal national issues, a weakness it shares with dependency. In an attempt to correct this significant deficiency, Hamelink urges a recognition that "the outwardly sovereign state tends to appropriate also sovereign control over its citizens." This, he maintains, "is the characteristically Hobbesian vision in which only the absolute sovereignty of the state (the leviathan) can control the eternal civil strife." To address this, Hamelink suggests that state sovereignty ought to be regarded as "more than the emancipation from the powers of emperors, popes and nobility. The development of legitimate sovereign states went together with the development of egalitarianism in which subjects became citizens." [Hamelink 1990: 2]

Nonetheless, it has to be recognised that currently it is the state which is the most important INDIGENOUS actor in the determination of policy in telecommunications in most Third World societies. In the Caribbean, where non-state actors are mainly professional organizations and trade groups, it is still the state to which the society traditionally looks for the formulation of policy and the protection of the interest of citizens. The diverse, participatory democracy envisaged by pluralism, is, in the Caribbean context, confined to periodic elections, in which policy areas such as telecommunications are rarely central issues.

Synopsis

The linkage between the state and the promotion of electoral democracy, which characterised early forms of pluralism, has understandably encountered severe criticism, resulting in some modifications. A competition for votes between sometimes similar political elites twice in each decade does not appear to constitute an effective influence on policy-making or state actions. Rather, it could serve as a device for maintaining the status quo by creating the illusion of democracy, as Parenti points out in his analysis of the United States [1983: 216]. At the level of many small under-developed societies, while the degree of popular electoral participation is often higher than in the United States, a lack of effective popular involvement in the periods between elections is another important deficiency in the process of public policy formulation [Bishop 1983: 138].

More recent interpretations of pluralism have sought to describe a more responsive and diverse pluralist process involving multiple group and sectoral influences on state decision-making. But in the context of the Caribbean telecommunications sector, interest group representation advocated by the democratic pluralist school remains weak. The state though itself weak and subordinate to the demands of foreign capital, continues to be regarded as the leading local source as well as the prime regulator of policy on telecommunications issues.

We isolate for special attention in our analysis the interdependency strand within pluralist thought. The more extreme elements envisage a global market in which the state and national policy-planning cease to be important factors, with multinational corporations and other capitalist non-state actors dominating decision-making. In evaluating the appropriateness of this brand of interdependence, the inescapable question is: in whose interest would such an approach operate? For it to be useful as a tool of policy analysis for underdeveloped countries, the extreme exponents of interdependency would also need to take more into account the stark differences in economic strength, size and historical factors among countries. The presumption of a harmony of interest underlying the theory appears to be more in favour of the dominant states and their non-state actors who find it convenient to assert the identity of their interests with those of the community as a whole. Such an approach would involve severe implications for small, vulnerable societies such as those in the Caribbean region, whose interests and policy goals were fundamentally different from those of the multinational corporations.

At the same time, the existence of these powerful private non-state actors, particularly in the field of telecommunications cannot be ignored. And Hamelink's concern to extend analysis beyond the nation-state is well founded. From the available data discussed in this study, Cable and Wireless as a non-state actor is a more influential force in the determination of Caribbean telecommunications policy than the individual governments or state bureaucracies. But is this the result of an inevitable and inexorable globalization process, or the subjective failing of national and regional policy planning? According to Krasner, this weakness is more likely to be the result of both internal and external factors [Krasner 1985: 3].

1.1.3 - Elite Theory

Whereas pluralism is premised on the dispersal of power in society, the elitist model regards power as being concentrated in the hands of specially privileged groups or elites. Following the conceptual schemes of Mosca and Pareto, Bottomore identified the basic notions common to elite theory: "in every society, there is and must be, a minority which rules over the rest of society; this minority, the 'political class' or 'governing elite', composed of those who occupy the posts of political command and, more vaguely, those who can directly influence political decisions - undergoes changes in its membership over a period of time... ."[Bottomore 1966: 12].

Bottomore distinguishes within the political class, a smaller group: the political elite, which consists of "those individuals who actually exercise power in society at any given time". These would constitute cabinet and high government officials, senior bureaucratic and military leaders and influential business or aristocratic families. The wider political class includes this group, but also technical, professional, intellectual and business elites across a range of national sectors, as well as a possible counter-elite, "comprising the leaders of political parties which are out of office, and representatives of new social interests or classes" [1966: 14].

The concept of political elites was developed and elaborated to counter the ideas of class enunciated by Marxism, and to a lesser extent in criticism of the majority rule dictum of modern pluralist democracy. The inclusion of the notion of the circulation of elites contested Marx's concept of a stable and exclusive ruling class. Bottomore points out that the determinism for which the classical elite theorists criticised Marxism is no less evident in their own view that all societies consist of elites and non-elites [1966:18]. Both marxism anmd elite theory describe the existence in various societies of dominant groups, setting the political agenda and determining policy. While both concepts are useful, the fundamental distinction for us is that which is based on control of the economic resources. While elites may exist in many professional, bureaucratic or other policy sectors, they are often responding to the central, agenda-setting power of social class, based on the control of decisive economic resources.

Max Weber saw the process of bureaucratization as a necessary corollary to the expansion and increased complexity of public government in modern industrial society [1947: 328]. The creation of administrative and bureaucratic institutions by the state engenders specialists in many areas of public policy-making. The power implicit in administering large bureaucratic organizations, could in some circumstances result in the effective control of decision-making by the bureaucratic power elites in top administrative positions. However, while such institutional positions are often very important sources of elitist power, it would appear that economic class position functions as the overall force to which these elites most readily respond in the small, newly independent countries, such as those in the Caribbean region.

In the telecommunications policy environment of the region, the dominant power source is technical expertise and investment capital, both of which often reside in the same external investing multinational company or funding agency. Commenting on the process of telecommunications policy formulation in the region, Jones noted that "within the Caribbean interest group universe, the people with the command over the technicity, those with the technical skills in the communications field and who advise government, are themselves very important agents of change and policy determination."[Jones 1984: 13]. And Stone points out that apart from the senior political leaders and their key local advisors, the most dominant influences on public policy formulation in Jamaica in the 1980s were the main international financial and aid agencies and big business.[Stone 1989: 38]. We believe that the situation thus described in Jamaica is not far removed from the scenario in the wider Caribbean.

Synopsis

Elite theory appears to suitably describe much of the process of policy formulation in many Caribbean territories, such as in Jamaica, Barbados and several of the even smaller Eastern

Caribbean countries. The elites involved in this process are not just locally based technocrats, but more influentially, the expatriate advisors who are part of technical agreements or management contracts signed between governments and multinational corporations of multilateral lending agencies. Limited technical knowledge at a wider societal level which is linked to severe limitation of educational opportunities and technical training means that these elite policy actors are not constrained or counter-balanced by diverse pressure groups, as envisaged by democratic pluralism.

In his study of small developing states, Gayle contrasts the limitations faced by these states with the scope of their larger counterparts: "larger polities tend to have greater state capabilities, so that citisens (sic) can be offered participation in a far wider range of relevant and vital decisions." [1986: 3]. Whether these capabilities are utilised in many larger states is still open to question. But in the micro-states of the Caribbean, for example, as yet un-developed pressure group structures and weakness in public information systems, contribute to limiting the effective,public participation in such issues as alternative technologies, corporate monopoly and investment decisions to bureaucratic and corporate business elites.

The elitist method of decision-making appears more open to influence, if not manipulation by powerful sectoral interests than an approach involving public debate and alternative policy proposals. In the region, the situation is exacerbated by acute political fragmentation, which enabled private interests such as Cable and Wireless to pursue a single corporate strategy in negotiation with elites from the various nation states, each pursuing what is perceived as its own particular national or elite interest.

1.1.4 - Corporatism

Corporatism, according to Wyn Grant, is " a process of interest intermediation which involves the negotiation of policy between state agencies and interest organizations arising from the division of labour in society". The policy agreements which result from this process of negotiation, "are implemented through the collaboration of the interest organizations and their willingness and ability to secure the compliance of their members."[Grant 1985: 1]. Developed during the period after the First World War, theories of corporatism attempt to explain the reciprocal relationship between government, the corporate sector of large scale, mostly multinational corporations, and the trade union movement. The period was marked by growing economic depression and an increasingly interventionist role by governments into economic activities.

Cawson argues that among the consequences of this increased state activity was a growing emphasis on economic regulation and social planning. One response to this was "the emergence of functional interest associations aiming to influence and mediate state activity in various sectors." Cawson notes that in the economic field, "the most influential of these were the cartels through which manufacturers protected themselves against the harmful features of oligopolistic competition."[Cawson 1978: 191]

The bargaining relationship between the state and these interest organizations arose because, according to Cawson, "governments have had to adjust to the existence of centres of power outside the state" [1978: 179]. He notes that "the crucial transformation occurs when interest groups change from being private protective associations, and move towards the establishment of regular and mutually supportive relationships with government."[Cawson 1978: 191]

"The corporatist thesis" argue Ham and Hill, "is that the state has moved from a position of supporting the process of capital accumulation to directing that process. In making that shift, new patterns of relationships have developed between the state and the major economic interest groups, and the state, although constrained by these interests, has autonomy deriving from its command of legal, organizational and other resources. Such autonomy enables the state to act in the interest of capital, labour and other interests as appropriate."[Ham and Hill 1984:41]. This interpretation, seemingly close to the pluralist conception of multiple and equal group influence on the state, is regarded as different from pluralism in that corporatist decisions "reflect the outcome of a bargaining process between corporate interests, which implies the assumption that each party is able independently to exercise some form of sanction. Power is thus neither pluralistically dispersed, nor concentrated, but polycentric within an overall hierarchy."[Cawson and Saunders 1983: 16]

As with other conceptions of the state, there are many variants on the corporatist theory. Schmitter's well-known definition emphasises the representational monopoly which the state accords to interest organizations willing to function within a corporatist relationship. Corporatism, in his view is:

> "a system of interest representation in which the constituent units are organised into a limited number of singular, compulsory, non-competitive, hierarchically ordered and functionally differentiated categories, recognised or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports." [Schmitter 1974:93-94]

Schmitter describes two types of corporatism: state and societal. State corporatism in his perception, would proceed more in an authoritarian and anti-liberal, even fascist manner. Societal corporatism, although also involving a strong and interventionist state, is less aggressive in style, seeking, by the use of rewards, pressures and bargaining, to negotiate with non-state associations towards their incorporation into state-determined objectives. Schmitter's societal corporatism accords with the macro-corporatist approach described by Grant, who disaggregates the concept further to refer to meso-corporatism operating at the industry level and micro-corporatism functioning at the level of the firm [Cawson 1985: 10-12].

Synopsis

The role of the capitalist state is neither even-handed in class terms nor passive. Corporatism provides a very useful analytical tool to describe the active pursuit by the state of the interest of the corporate sector and the reciprocal response of big business in carrying out certain agreed objectives of the state. The process of negotiation which characterises societal corporatism, underlines the convergence of objectives which can exist between the state and multinational conglomerates.

The category of meso or industry-level corporatism accords well with the early conduct of the British imperial state and that of the privately owned pioneering British telegraph and cable companies in the last half of the Nineteenth century. In promoting their development and expansion, the state was able in return to secure implementation by the companies of the regime's empire-building objectives. The subsequent consolidation of the entire British overseas telecommunications industry into the single Cable and Wireless group, transformed meso-corporatism into a micro-corporatist relationship between the state and a single firm. Though falling outside of the era after the Second World War, when corporatism became more widely recognised, the inter-penetration of state and corporate interests in the telegraph sector conforms significantly to the descriptive and analytical features of corporatism.

Eventually, the merged Cable and Wireless Limited, became incorporated into the formal British state bureaucracy after the Second World War. The take-over took place under a British labour government willing to fulfill trade union demands for nationalization in exchange for their post-war co-operation. It is the concept of micro-corporatism, therefore, which offers the most useful frame of reference for our subsequent consideration of the role of the British government in its historical relationship with Cable and Wireless.

1.1.5 - Theories of the State: Evaluation

In examining the emergence of Caribbean telecommunications systems, we regard inter-state relationships at the national, regional and global levels as providing important political contexts within which the leading non-state actor, Cable and Wireless operates. But equally significant has been the relationship between Cable and Wireless itself, as a multinational corporation and the British imperial government. Initially this state/company relationship took the form of a symbiosis between the firm's corporate power and the central state authority, in a period which marked the zenith of Britain's imperial power and the rise of capitalism as the dominant ideology in Europe and the Americas.

In more recent times the company also had to operate in conditions where the great majority of its partnerships were with politically independent states. In the Caribbean, for example, the process of political de-colonization meant that Cable and Wireless had to adjust to an attendant increase in the number of regional governments. Company-state relationships have not been confined, therefore, to the interaction with its powerful home-government and prime benefactor. The company itself has undergone change, switching from a state-owned enterprise to a private corporation in the last decade. This development in itself has been the source of some concern among newly-independent agricultural micro-states confronted in an unequal negotiating relationship with a global, techno-dominant corporate monopoly.

This review of approaches to the state, then, has allowed us to examine the various models which may be applicable to policy decision-making in the many contexts within which we encounter state power in this study. Like Cawson and Saunders [1981] and Stone [1983], we see no need to adopt any single one of these theories across the range of contexts in which we may consider the state and political influences on it. "Instead of making a choice between mutually exclusive theories, the task of the analyst is to use them as guides to discover the multiple channels that link private interests with the state." [Stone

1983: 208].

On this basis, the indications from our analysis would suggest that the concept of corporatism is the approach which best characterised the relationship between the British government and the cable industry from its founding until its nationalization in 1945. This relationship has had certain important implications for the pattern of development of the company and its contact with the Caribbean. Similarly, a combined application of the related elitist and Marxist theories of the state appear to be the best framework within which to interpret the conduct of Caribbean states in their historical association with the Cable and Wireless, as well as in their conduct of internal policy-making. The pluralist political model is viewed as less useful given the weak status of interest group representation in the sector and the negligible impact of the electoral process on telecommunications policy-making.

Before the states in the Caribbean attained, in principle, an independent political role in policy-making, their societies were overtly dominated by the centrifugal forces of imperial rule from London. Our presentation later of some of the historical research data will highlight the vital role which was then perceived for improved telecommunications in the control of a far flung colonial empire. We will also discuss the circumstances under which the early development of the telegraph technology and its expansion throughout the empire, were not directly undertaken by the British state but by private companies with varying degrees of state sponsorship.

The extent to which Cable and Wireless continued in this corporatist relationship with the British government will also be considered in some detail later. But the many advantages to the company of active imperial state support are likely to have weighed heavily in creating and sustaining the entrenched monopoly control enjoyed by Cable and Wireless in the modern Caribbean. The role then, of the state during early capitalism as well as in the modern era of imperialism can be of considerable significance in understanding the wider context of the company's emergence and of the basis of early telegraph expansion into the Caribbean.

1.2 - IMPERIALISM AND EMPIRE-BUILDING

Ann Spackman points out that the joint stock company was "initially the state licensed means of mobilizing private wealth for state expansion. Later, it was adapted for the growth of domestic enterprise". She notes that "Capitalism emerged out of feudalism and the restrictive guild system by way of the inventions of credit, banking and individual contractual freedoms, all of which were established and protected by statute law" [Spackman 1975: 344].

The discovery of telegraphy in 1837 and the subsequent development of submarine cables fell within the regulatory ambit of these statutes [Headrick 1988: 108-109]. The innovations also occurred in the period of the classical Industrial Revolution which saw the emergence and dominance of modern capitalism as the primary mode of production over the feudal land-based relations. In the analysis of Karl Marx such revolutionary changes in political economy occur when technology outgrows the existing economic structure.Advances then in the smelting of iron, in the development of locomotives and in a whole range of machine tools and production methods in Britain, contributed to the rise of capitalism. But at the same time, they necessitated more rapid and improved communications methods as a catalyst to the development and spread of capitalism.

Among the pressing economic requirements of this new era was also the need for increasingly greater quantities of raw materials and additional market outlets for their manufactured products. For these opportunities, the emerging capitalist class began to look abroad, in the vast empire which had been acquired militarily up to two centuries earlier. Commenting on this process in relation to the large colony of India, Marx wrote: "The millocracy has discovered that the transformation of India into a reproductive country, has become of vital importance to them, and that, to that end, it is necessary above all to gift her with the means of irrigation and of internal communication." [Marx: New York Herald Tribune, July 11, 1953: 7]

The targets in India for the infrastructural investments were cotton, tea and mineral resources in the same way that for the Caribbean colonies it was primarily sugar and bananas. Marx supposed that these profit-motivated economic investments in railways in India, for example, would have provided the basis for the eventual industrialization of such colonies.

> "You cannot maintain a net of railways over immense country without introducing all those industrial processes necessary to meet the immediate and current wants of railway locomotion, and out of which there must grow the application of machinery to those branches of industry not immediately connected with railways. The railway system will therefore become, in India, truly the fore-runner of modern industry. This is the more certain as the Hindus are allowed by British authorities themselves to possess particular aptitude for accommodating themselves to entirely new labour and acquiring the requisite knowledge of machinery" [Marx: New York Herald Tribune August 8, 1953: 5].

The course of history has proved Marx wrong in this analysis, so demonstrating that neither the simple fact of the existence of human aptitude nor elements of imported technology, whether in the form of railways or telecommunications networks, are sufficient conditions for real economic development and the transfer of technology to the countries on the global periphery. Not only did the introduction of railways, textile mills and other technologies fail to create industrialization in

India, it aided in the devastation of Indian handicraft textile production and facilitated the inland transportation of imported textiles from Lancashire in England [Brewer 1980:57].

Nonetheless, in acknowledging the merits of Marx's overall thesis of capitalism, many theorists have since based their analysis of the relationship between dominant world powers and the undeveloped, dominated societies on the basic ideas of Marx's paradigm. Among the most well known of these, Lenin [1969:73] advanced the thesis that imperialism represented the highest and last stage of monopoly capitalism. Finance capital from the industrialised capitalist economies would increasingly be exported abroad in an inter-imperialist competition for profits, raw materials and spheres of dominance and control. In Lenin's analysis, this process would lead to the spread of capitalist relations of production. The notable difference in emphasis from Marx is the central role identified by Lenin for finance capital, which he regarded as the product of the fusion of industrial and financial capital into vast inter-locking conglomerates and price-fixing cartels.

Because of the absence of price-cutting in such monopolistic corporate structures, blocs of finance capital form on a national basis, with strong links to the national parent state structures. Competition is therefore escalated into a contest between capitalist states in the forms of annexation, trade barriers, spheres of influence and outright military conflicts. But in common with Marx, Lenin and Bukharin argued that capitalist development would have been achieved in the under-developed countries. The economic stagnation and social deterioration in the majority of underdeveloped countries, call seriously into question the correctness of these predictions. The aspect of their arguments which has been more accurately borne out was their expectation of a continued concentration of wealth and power in the hands of corporate giants in the global centre as one definitive outcome of the interaction among global monopolies.

In Latin America,one of the earliest political theorists to recognize the strengths as well as the significant limitations of Marxist analysis was Jose Carlos Mariategui. Writing in the 1930s, he argued that Third World societies such as Peru were characterised by feudal and semi-feudal modes of production. Radical transformation could not await the transition to capitalism. While for Lenin imperialism was a stage of developed capitalism, Mariategui argued that in the underdeveloped territories imperialism was also related to and benefitting from persistent pre-capitalist relations, which he saw as intensifying the grip of Imperialism in these countries [Mariategui 1971].

While also viewing the route to development in the region as industrialization, Mariategui, unlike Marx placed great emphasis on the peasantry as well as the struggle for internal re-construction as pre-requisites for national development and a re-ordering of global economic relations. This concept by Mariategui found practical expression and support in the success of the Chinese revolution in achieving spectacular advances for self-reliance against the rural dependency on feudal structures.

1.2.1 - Structural Implications of Imperialism

Unlike Mariategui, Johan Galtung does not make a specific association between imperialism and capitalism. For him, Imperialism 'is a system that splits up collectives and relates some of the parts to each other in relations of harmony of interest, and other parts in relations of disharmony of interest or conflict of interest' [Galtung: 1981: 302-304]. He outlines a structure of imperialism characterised by a relationship between 'Centre' and 'Periphery' nations. The powerful nations of the Centre are able to exercise such diverse influences over the weaker ones on the Periphery as to create what he euphemistically calls 'disharmony of interest' between them. A similar dichotomy exists within the periphery itself, where centre-centre relations, or contacts between developed population areas are stronger than the relationships between rural and urban areas, described by Galtung as internal centre-periphery relations [1981: 301].

Galtung identifies 'value exchange' or trading relations as one source of inequality in the interaction between the two global groups. His model encourages consideration of 'who benefits most' in the flow of goods and services in either direction. At another level, which he calls 'intra-actors effects', he contemplates the consequences of the international interaction within the respective countries: 'Does the interaction have enriching or impoverishing effects inside the actor or does it just lead to a standstill?' [1981: 305-306]. Galtung himself does not come down decisively on an answer to this key question, but by posing it allows room for consideration of some primary effects on the periphery of his concept of Imperialism.

The global element of Galtung's model appears to be more descriptive of effects and interaction process than it is analytical of the causes. Unlike the Marxist tradition, he provides no definite guidance as to the principal motivation for domination. Galtung identifies five types of imperialism: economic, political, military, communication and cultural. Though usefully distinguishing the multifarious influences of a dominant power, he still does not clarify the primary motives for domination and the main causes of under-development, which on both counts appear to be economic.

Galtung's structural theory of imperialism, however, does provide us with a useful descriptive framework of what he calls 'interaction relations' between industrialised and under-developed countries and between regions within both sets of countries. His concept of 'conflict of interest', which he defines as 'a situation where parties are pursuing incompatible goals', is an apt description of the relationship between national policy objectives in Caribbean telecommunications and the policy goals being pursued by the global Centre, represented by Cable and Wireless within the sector and by the multi-lateral lending agencies at the macro-economic level. Equally, Galtung offers the concept of a 'correspondence of interest', as an antithesis to 'conflicts of interest', thereby facilitating analysis of the shared values both within the Caribbean Periphery and between centres and peripheries globally.

1.2.2 - Imperialism and Communication

Galtung's analysis of 'communications imperialism' is of particular interest to us. The mechanisms through which this, like the various other forms of imperialism, operate was through what he called 'vertical interactions' between Centre and Periphery countries, the latter being the colonies and ex-colonies and the former the 'mother country' or hegemonic metropole. The 'interactions' worked to the disadvantage of the periphery in such areas as trade and communication. Direct interactions between peripheries is missing, with third party external contacts monopolised by the Centre. Periphery interaction with other global centres does not exist, nor does wider multilateral relationships involving Centre and various peripheries.

In addition, Galtung's model describes a feudal centre-periphery structure conforming with the maintenance of colonial ties. "A territory may have been exploited for raw materials most easily available and/or most needed in the Centre, and this in turn leads to a certain social structure, to communication lines to deposits, to trade structures..." [Galtung, 1981: 307]

Applied to the specific sector of communication, Galtung's approach helps us to understand why early British submarine cables initially targetted transatlantic trading destinations in the United States and the Caribbean, as well as the tea and textiles routes to India and the East. It also helps to explain why several additional miles of cable work was often undertaken to ensure that the lines did not intersect colonies belonging to other European powers. Inferences can be drawn as to why telephone calls from Jamaica to neighbouring Cuba, a former colonial periphery of Spain and location of the region's first successful anti-capitalist revolution, still takes much longer to connect than calls to distant London, or to New York in the United States.

Galtung's theory of communications imperialism finds support in the prior work of Innes. In discussing the significance of communication to the British and other geographically dispersed colonial empires, Innes noted: "In the organization of large areas, communication occupies a vital place...The effective government of large areas depends to a very important extent on the efficiency of communication."[Innis 1950: 7].

Galtung's theory is also capable of enhancing our perception of post-colonial geopolitics in the region. For example, despite the close proximity between the ex-colonial Caribbean and the

United States which may be seen as a relatively new imperialist Centre, important areas of European dominance have been preserved, such as the strength of residual British hegemony over Caribbean telecommunications, education and sport.

In taking account of the relationships within countries, Galtung's analysis makes frequent reference to the existence of internal inequality and 'disharmony'. This internal disparity, possibly reflected in urban versus rural development, is held to be greater within the Periphery nations than in the Centre Nations. Applied to communications, it bears relevance to the accumulated data indicating gross disparity in both media and telecommunications services between urban and rural areas, and between the industrialised and the underdeveloped countries.

The 1983 World Bank study of global telecommunications and development indicated that the underdeveloped countries, which together had 71.2 % of the world population, had only 7.4 % of the global stock of telephones. The study showed that the 7 most developed countries, on the other hand, enjoyed 92.6 % of the world's telephones, despite having only 28.8% of the global population in 1981. In Latin America and the Caribbean a telephone density of 20 million reflected a mere 3.9 % of the global stock, compared to a density of 192 million telephones in neighbouring United States, which had 37.8 % of the world's telephones but only 5.3 % of its population.[Saunders et al 1983: 6]. Moreover, according to a report to the International Telecommunications Union in 1985, three quarters of the world's population live in countries with 10 telephones or less for every 100 persons; over half live in countries with less than one telephone for every 100 persons [Maitland Report Summary, 1985:6].

These statistics confirm the disparity referred to in Galtung's conception of communications imperialism. The World Bank survey also supports his analysis of the nature of internal disparity when it finds that: "In industrialised countries, telephone density varies less between cities and nonurban areas than in developing countries, where a large portion of the telephones is usually concentrated in a few large cities, with less access to service in much of the rest of the country." [1983:6-7].

Inevitably, these patterns of inequitable distribution of global and national telecommunications resources are paralleled and reinforced by other indices of communications inequality. In book production, for example, Europe and the Soviet Union account for 54.4 % of world total compared to 1.3 % in Africa in 1987. Reflected in terms of trade in this traditional information resource, it means that Europe including the U.K. earned US$ 3,278.1 million in book exports in 1987 alone, compared with an export value of US$ 10.3m by Africa and US$ 80.1m by Latin America and the Caribbean in the same year [UNESCO 1989: Table 11.1].

This trend feeds into what, in Galtung's model, is regarded as Cultural Imperialism. But more generally, it forms part of a cycle of economic underdevelopment and 'dependency' experienced by a majority of countries of Africa, Asia, Latin America and the Caribbean.

Synopsis

The penetration of the colonial peripheries with the infra-structure of industrial capitalism did not provide a basis for industrial development in the peripheries themselves because the investments were not in support of local industrial development but of capital accumulation and expansion for Europe. Urban enclaves were created to service the needs of external industrialization, leading to what Galtung described as a disharmony of interest between rural and urban areas in the colonies. A similar, though less extreme disparity developed in the metropole between rural and urban levels of development, leading to a greater correspondence of interest between the capitals of the north and south and between rural communities in both sets of countries.

In the modern Caribbean, this pattern is still recognizable in telecommunications, as in other aspects of social and economic development. It is often easier on this imperial construct, to communicate between capitals, a situation which best suits large business concerns, governments and the bureaucratic elite. This situation in telecommunications terms is an indication in one sector only of the relationships of dominance and dependency bequeathed by imperialism and its processes of empire-building.

While the class-based marxist model discussed earlier provides a more precise description of the existing internal economic and class relationships, Galtung's approach to imperialism can be useful in highlighting other key disparities such as rural-urban resource distribution, post-colonial geo-political continuities as well as the cultural and communications implications of colonialism.

1.2.3 - Sub-Imperialism and 'Internal Colonialism'

Of course, a description of internal disparities within countries is not peculiar to Galtung, though his linkage of it to ideas of imperialism in the modern era may well be. Other theorists, notable Pablo Gonzalez Casanova and Rodolfo Stavenhagen, both from Mexico, have described these relationships as ones of 'internal colonialism' [Stevenhagen 1986: 68-70]. As social anthropologists, these writers have focussed more on the oppression of rural-based and indigenous sub-groups of national populations. In the Caribbean, these ideas are applicable to the enslavement and in some cases the extinction of indigenous peoples historically, such as the genocide against the native Arawaks Indians of Jamaica and the enslavement of Africans by a minority of European settlers.

More currently, concepts of internal colonialism could justifiably be applied to the economic and social gulf existing between the powerful urban expatriate elites on the one hand and the growing majority of dispossessed in the region. This economic and class-based disparity has its reflection in the national telecommunications universe in the form of the penetration rates, reflecting large numbers of unserved households, telephone distribution skewed in favour of upper class households and the relatively unbalanced provisions to large business users.

Applied at a regional level, a variation of the notion of 'internal colonialism' has been rendered as the concept of 'sub-imperialism'. According to Marini [1972:14-24] Brazil as a large, industrializing but still dependent capitalist economy has acquired the status of a sub-imperialist economy in relation to its regional neighbours. It is sub-imperialist because it does not yet possess a technological base independent of the global centre. But to exert its secondary influence, the ruling circles made up of economic and military elites establish partnerships with international imperialism. Under such arrangements foreign capital is invited into certain sectors of the sub-imperial economy in exchange for some access to advanced technology and to the global markets controlled by the Centre. A major internal implication of this process is the acute exploitation of local labour, with military repression often required to suppress the endemic instability derived from gaping class disparities.

From the experiences within the Caribbean itself, charges of sub-imperialism have arisen in the relationship between the 'more developed countries'(MDCs) and the economically 'less developed countries (LDCs) in the eastern Caribbean.

Described in economic terms as polarization, this process by which industrial investment tends to accrue to the MDCs, has been a major factor in the negotiations over regional integration for over twenty years. Caribbean economist W.Arthur Lewis, for example, analysed the economies of under-developed countries as consisting of dual structures. In his model the rural agricultural sector provided a reserve of labour for the urban industrial sector which is therefore able to undergo major expansion [Lewis 1950:1- 16].

But, Lewis argued in favour of an emphasis on urban industrialization over agriculture. The production of primary agricultural raw materials for export could not sustain economies with a burgeoning birth-rate. He recommended as an alternative a development approach predicated on the manufacture and export of industrial goods, in order to reap comparative advantages in cheap labour. The capital and entrepreneurship for this approach would come from outside of the underdeveloped territory. In the case of the Caribbean, he expected that this expertise would come from the United States in particular, under a policy of industrialization by invitation, as attempted in the United States neo-colony of Puerto Rico in the 1960s [Lewis 1949, 1950].

For at least a generation, the ideas of Lewis held sway in development planning for the region. But over two decades later, when the results of this approach seemed less than expected, it began increasingly to be called into question, particularly because of its implicit neglect of indigenous resources and its reliance on neo-colonial or imperialist centres as the primary source of development initiative and capital. Notwithstanding the criticisms and modest results, major tenets of the Lewis model continue to inform some policy planning in the region. Within the telecommunications sector, the development of export-processing zones for data in Montego Bay, Jamaica and in Castries, St Lucia are very much within the concept of offering cheap excess labour to entrepreneurs re-locating from the North, even if in these cases it is services and not manufactured products which are being exported.

Other writers examining the role of Imperialism in the internal dynamics of under-developed countries have focussed on the collaborative role of sections of the local ruling classes , who form the internal "infrastructure of dependency" [Bodenheimer 1971: 327]. Such elite groups, usually urban-based, sometimes stand to gain economically from an uncritical association with a dominant external corporate or governmental partner. Where necessary, this association can easily be upgraded to active support or defence of the foreign partner, creating local legitimacy.

Schiller describes the increasing involvement of local elite sectors in the system of Imperialist control as a form of transformation of that system:

"...in its re-alignments of power centres, its changes sources of exploitation and its modern mode of organization and control. In this sense, the concept of cultural imperialism today best describes the sum of processes by which a society is brought into the modern world system, and how its dominating stratum is attracted, pressured, forced and sometimes bribed into shaping social institutions to correspond to, or even promote, the values and structures of the dominating centre of the system." [Schiller 1976:9].

In circumstances of extensive geographical separation of the actors in these relationships, it is not difficult to recognize that reliable, constant and rapid systems of international communication are a requirement for effective functioning of such interactions. According to Innis, global society had earlier undergone a transition from a preoccupation with control over time to one of management and control of space. "The use of armed force in conquest and defence emphasised the spatial concept and organization of society in terms of space rather than time and continuity. It meant demands for more effective control over space and for more efficiency..." [Innis 1951 :106]. By the early 20th century, the military instruments of this control over space, began to be supplemented in some areas by instruments of communication and cultural incorporation.

Synopsis

The concepts of imperialism and colonialism have traditionally been associated with dominance by an external power. Interpreted internally or in a regional context, internal colonialism can be taken to describe the disproportionately low provisions for rural areas or the hegemony exercised by a more developed part of a region over its less developed counterparts. This analytical concept has validity in the context of a Caribbean integration movement involving sub-regions as well as territories of widely disproportionate sizes and resource endowments. The challenge of balanced development requires the confronting of existing notions of superiority in geographical, economic, constitutional or ethnic terms in the region.

Sub-imperialism is also a useful category for analysis, because it highlights the sometimes designated, sometimes self-appointed role performed by some regional territories or interest groups. In the negotiations over the Pacific Cable Board and, later over the telecommunications future of the Caribbean colonies, for example, Canada, then the largest British colony in the Americas, saw itself as a regional supervisor on behalf of the empire. But it also had nationalist visions of its own future role: "As a junior partner within the British empire, Canada internalised the imperial imperative of territorial expansion..", notes Thompson, in discussing the role of the 'Canadian imperialist' Sanford Fleming. Thompson disputes the view that "by promoting the growth of transoceanic telegraphy between members of the British empire, Canadian imperialists were..acting not in the interest of Canada, but the commercial, political and military interests of the U.K." [Thompson 1989: 16-17]. He argued instead, that these actions were in promotion of Canada's own nationalist and sub-regional leadership objectives as well.

The ideas and mechanics of domination need not emerge exclusively from external imperialists, but could be engendered internally, either on behalf of the imperialist centre or in the interest of indigenous ambitions. Equally, the modern instruments of colonialism need not arrive in the traditional guise of an external military or political presence. Technology such as telecommunications and media systems introduced into the South can and often do act as facilitating devices for exploitation. In the hands of the dominant classes both internally and externally, these technologies can also act as a reliable ally of imperialism and as a restraint on radical social change. Internal colonialism or sub-imperialism can result in telecommunications operating as a local conduit of foreign control rather than performing the catalytic role in development which telecommunications could be made to play.

1.3 - UNDERDEVELOPMENT: PERSPECTIVES FROM THE PERIPHERY

For over two decades after the Second World War, the leading school of thought among development theorists and communication specialists alike equated development with economic growth and therefore placed priority on urban industrial modernization of the Western model. The communications corollary to this dominant paradigm was argued most forcibly by Lerner: "Everywhere, for example, increasing urbanization has tended to raise literacy; rising literacy has tended to increase media exposure; increasing media exposure has 'gone with' wider economic participation (per capita income) and political participation(voting). The model evolved in the West is an historical fact....The same basic model reappears in virtually all modernizing societies in all continents of the world, regardless of variations in race, color, creed."[Lerner 1955:46].

The implications of such a view for the global south includes disapproval of what these theorists called the 'traditional society', mainly rural sectors or Galtung's internal periphery. It endorsed and legitimated the prevailing telecommunications emphasis on modern urban networks and the creation of 'new towns' and industrial centres rather than developing indigenous agricultural, fishing, entertainment and educational methods and resources. In mass media terms, it gave rise to the wide-scale acceptence, even by UNESCO, of the doctrine of 'free flow' of communications. This model envisaged the transmission of messages without an intrinsic regard to notions of balance in the flow of information between the global North and South. It is the the residue of this very idea which currently underpins the demands by the industrial North for an elimination of national constraints on the transborder flow of data and electronic services.

According to Rogers, another of the 'free flow theorists', development began with the introduction of new economic ideas into a social system from outside it, leading to high per capita income and modern standards of living. [Rogers 1969: 7-8]. Progress meant economic expansion measured on the statistical average of per capita income. Its major emphasis was on attracting development aid for large scale development projects with a built-in communications element to familiarize new users with the facilities. The model paid scant attention to national wealth distribution indicators. In addition, this approach placed very little store by the use of indigenous culture, local materials and internally generated ideas and methods, as important motive forces for development.

In essence, the ideas of this economic growth model supported the older concepts of colonial trusteeship and externally directed 'development'. The introduction by Cable and Wireless of new generations of equipment, buildings and transmission sytems, accords with this approach. Once the innovations are determined as beneficial to the region, the corporate sales and promotional departments are engaged to fulfill the requirements of the Rogers model.

By the early 1970s, the limitations of this ethnocentric model were becoming increasingly clear. According to Anayatullah it was premised "on a unilinear view and interpretation of history. It presumes that all history is inexorably moving toward the same destiny, same goals and same value systems as Western man has." [Inayatullah 1976:101]. To this, Anayatullah could easily have added not just western, but western industrial civilization.

1.3.1 - Structural Dependency and Realism

Within Latin America and the Caribbean, a succession of theorists on colonialism, development and under-development have contributed potent ideas in interpreting from the South the factors contributing to 'Third World ' poverty. Many of these writers began by questioning the adequacy or even appropriateness of dominant northern paradigms in explaining the persistence of underdevelopment in the south. "...there was no real reason why theories and approaches based on the idealization and simplification of the history of western industrial capitalism should apply to societies with completely different structural characteristics and historical experience." [Oteiza 1978:15].

Among those who sought to challenge and reformulate the traditional approaches were the economists of the Economic Commission for Latin America [ECLA], a United Nations agency established in 1947 and located in the Chilean capital of Santiago. For over three decades, ECLA functioned as the primary centre for alternative development thinking, utilizing a structuralist and reformist approach articulated initially by its leading theorist Raul Prebisch.

According to Christobal Kay [1989:26] "the originality of the stracturalist paradigm lies in the proposition that the process of development and underdevelopment is a single process; that the centre and periphery are closely interrelated,forming part of one world economy. Furthermore the disparities between the centre and periphery are reproduced through international trade. Thus, the periphery's development problems are located within the context of the world economy." Prebisch extends this argument by way of an analysis of international terms of trade which he regards as fundamentally unequal [Prebisch 1950: 1].

In place of the export-orientation, the ECLA economists advocated import-substitution policies based on a degree of industrialization in the economies of the South. This approach, like that of Lewis in the Caribbean, was to undergo some criticism and revision by a newly emerging generation of Latin American thinkers. Nonetheless, these ideas created the foundation stones for what was to become known as the Latin American theory of underdevelopment and dependency.

Among the more well known 'dependentistas' is the economist Andre Gunder Frank, who, consistent with that tradition, argued that underdevelopment in the global periphery was a result of the development process in the northern industrialised economies. Frank [1967:7] characterised this relationship as a structure of a global metropolis in the North and satellites in the global South. The relationship was essentially one of exploitation of the poorer countries - a process facilitated by the insertion of these countries into the world capitalist system of unequal trade and its attendant skewed international division of labour.

Critics of the dependency approach epitomised by Frank's early analysis argue that this holistic view exaggerates the importance of external factors while underplaying or even omitting the significance of internal variables. In the view of Petras and Brill [1985:405] "the globalist perspective paints a picture of domination based on a 'passive receptacle' notion of the Third World in which the internal class forces are non-actors, or even blank surfaces ready to be shaped and exploited by the 'Core'."

For Bernstein, [1982:231] the very concepts of 'internal', 'external' requires re-examination in light of the difficulty he sees in distinguishing between the aspects of value formation deriving from the 'national economy' and those deriving from the 'world economy'. In a similar vein, Ernesto Laclau [1977:36], also rejects "all talk of a single unique contradiction", arguing instead that "relationships of dependence have always existed on the margins of the existence of capitalism."

Dos Santos [1973], however, offers a specific context within which dependency may be said to exist. He defines it as:

> "a conditioning situation in which economies of one group of countries are conditioned by the development and expansion of others. A relationship of

interdependence between two or more economies or between such economies and the world trading system becomes a dependent relationship when some countries can expand through self-impulsion, while others, being in a dependent position, can only expand as a reflection of the expansion of the dominant countries, which may have positive or negative effects on their immediate development." [Dos Santos 1973: 76].

A major plank of the early dependency thesis, according to Blomstrom and Hette's 'ideal typical position', was the notion that "since the periphery was doomed to under-development because of its linkage to the centre, it was considered necessary for a country to disassociate itself from the world market...". [Blomstrom and Hette 1984:76]. Many dependency theorists have rejected this approach of unilateral de-linking or dissociation from the world capitalist system. They argue instead, for greater emphasis on policies of import substitution in preference to a more dependent export orientation.

Celso Furtado's response to economic dependency allows considerable room for a constructive involvement with global capitalist economic structures [1970, 1974]. He notes that an inward-directed development process can suffer from 'structural stagnation' and 'exhaustion'. These occur because once import-substituting industrialization has satisfied the domestic demand for consumer goods, it needs to re-adjust to the production of consumer durables, such as large domestic appliances and later, the production of machinery and other capital goods, all requiring larger amounts of investment [1970: 118-119].

Furtado argues further that the small size of the internal markets act as a brake on the expansion into durables and capital goods production because of an absence of economies of scale. It is at this stage that stagnation can set in, demonstrated by foreign exchange shortages, inefficiencies in production, low levels of profitability and importantly, inaccessibility to useful technological innovations.

Given the important deficiencies in strategies of export orientation and the weaknesses [see Furtado 1970: 100] in import substitution, Hatton questions the basis of pursuing one or the other of these policies exclusively. Based on the experience of the Dominican Republic, (about the same size as Jamaica), Hatton has demonstrated that "selective import substitution strategies and export promotion are not mutually exclusive alternatives, in that the affirmation of the one does not imply the negation of the other.. ." The two approaches, he points out are complementary, each depending on the other for its success and effectiveness. "The complementarity approach breaks with the traditional approaches of 'inward development' or 'outward development' which have characterised the debate and the concrete strategies of growth conducted in successive waves of adoption and reflection." [Hatton 1989: 199].

This analysis is of particular pertinence to the territories of the English-speaking Caribbean with very small national markets and a combined CARICOM population of only five million. The dilemma of this region is how to constructively engage in a relationship with the global capitalist system without being dominated and directed by either its multi-lateral agencies such as the International Monetary Fund, or its trans-national corporations such as Cable and Wireless. The enhancement of the early structuralist approaches by more versatile and internally relevant contributions, creates a more useful and balanced framework within which to interpret and address the difficulties in regional policy planning for development.

The emphasis of the more widely known dependentistas, particularly Gunder Frank, was undoubtedly on the structural deficiencies bequeathed to the underdeveloped countries by an exploitative and unequal system of international relations. This emphasis often gives rise to the criticism that it neglects internal factors, some well within the subjective control of local policy-makers. The emphasis on the international structural factors is unapologetically defended by some writers from the south as reflective of reality. Walter Rodney argued for example that the internal weaknesses are but consequences and not causes of underdevelopment; the causes being located primarily in the external sphere:

> "It is true that because of lack of engineers, Africa cannot on its own build more roads, bridges and

hydro-electric stations. But that is not a cause of underdevelopment, except in the sense that causes and effects come together and reinforce each other. The fact of the matter is that the most profound reasons for the economic backwardness of a given African nation are not to be found inside that nation. All that we can find inside are the symptoms of underdevelopment and the secondary factors that make for poverty." [Rodney 1971:30].

The dependency school, however, does not consist of an homogenous body of theory on Third World underdevelopment. And many theorists within the modern dependency paradigm now adopt a more flexible approach. Even Gunder Frank, for example, acknowledges that internal policy is a critical element in post-colonial economic development. He notes, however, that this internal state policy itself derives from class conflicts and from struggles between conflicting interest groups. Some of these groups and classes stand directly to benefit from the perpetuation of the externally dominated status quo and would therefore seek to direct state policy towards an unquestioning retention of the external exploitative associations [Frank 1972:13].

Although Frank may be the most well known, he is but one of a diverse body of dependency theorists, many of whom attempt to meet more directly the legitimate criticisms levelled against the single-mindedly externalist approaches. Sunkel [1973: 133] argues that underdevelopment expresses itself in two polarizations: one between nations but also another within nations. And while the external ones are decisive, no realistic analysis of development should underestimate the internal structural and political elements. It is this approach to dependency which we find to be most relevant to the issues under examination here: A recognition that analysis and resolution of the post-colonial problems of under-development requires a thorough appreciation of the external causes but also takes fundamentally into account the varied internal factors which also contribute to stagnation or in certain conditions to economic growth.

> "The importance which is attributed to external conditions should not obscure the existence of internal conditioning structures as, even though in the long run process of change the influence of the former tend to prevail, the structural transformation is the outcome of the interaction between both."
> [Sunkel 1973: 133]

The ideas of structural dependency, thus approached, offer a potent explanatory and analytical context for Caribbean telecommunications.

Synopsis

Historical linkages by shipping, post, telegraph and telephones to the British imperial Centre of economic power operated primarily as communications conduits facilitating a global division of labour in which the Caribbean was a raw materials appendage. The network was configured to meet the administrative and economic requirements of the external power, and these requirements were frequently antithetical to balanced development and self-sufficiency in the region's economic or communications sectors. Communications itself was not regarded as a critical input in the economic or cultural growth in the periphery itself, but as the instrument of privileged urban expatriate and business elites. The existing telecommunications structure, controlled by external interests of the same traditional lineage, continues to bear close resemblance to the elite-oriented, urban based structure of the past.

Development and under-development are viewed as two aspects of a single global and historical process. In telecommunications development, as with the wider economic sector, the industrialised countries of the north have a dominant control over the technology, capital and global institutional infra-structure, which limited Third World economic development. While the holistic view of the dependency paradign does not tell the entire story of underdevelopment, it does describe a current global process of structural incapacity, in which the economies of the underdeveloped countries 'can only expand as a reflection of the expansion of the dominant countries' [Dos Santos 1973: 76]. The telecommunications environment, similarly, is configured to respond more readily to external demands upon it rather than to the needs of the country as a whole, including its rural and agricultural areas.

The limitations of the dependency analysis is its inadequacy in addressing the internal weaknesses which interact with the global structural problems to further limit the scope and pace of development.

1.3.2 - Collective Self-Reliance

In the face of difficulties with the prescriptive aspects of Dependency and the often adverse socio-political implications of export-orientation, Armart Mattelart, argues in favour of an approach, complementary to Dependency, but which is based on humane internal re-structuring as a strategic aim. In this approach, "Development begins to be envisaged, no longer as an externalization movement, whose motor of development is trade and transfers from the exterior, but a process of mobilization of local resources with a view to satisfying local needs. It is in this context that the notion of 'Self Reliance' operates." [Mattelart 1983: 22].

In support of the same concept, Kempe Ronald Hope advocates a widening of the framework to cover regional and inter-regional self-support strategies, which he describes as Collective Self Reliance. According to Hope [1986:19], Collective Self Reliance in this framework is taken to mean "autonomy of decision making and full mobilization of a society's own resources under its own initiative and direction." The concept therefore seeks to bring together societies embarking on this path "so as to embrace truly co-operative relations among self-respecting mobilized societies."

Analysts using the concept of Self Reliance concur on the centrality of local control of development resources. According to Mattelart, Self Reliance is understood as "the valuation of resources for the satisfaction of fundamental needs, and as the local control of these resources."[1983:23].Among the constituent aspects of Self Reliance identified by Mattelart is a rejection of linear industrialization strategies and a renewed emphasis on qualitative criteria for development in place of gross national product [GNP] measurements.

Like Hope's 'collective' approach, Mattelart also underlines the value of solidarity as a defining feature of Self Reliance. He sees development strategies "conceived in terms of satisfying the needs of the entire population and not being content to respond to the desires of an elite or middle class fractions." Another element is the integral relationship between economic development and the preservation of cultural integrity and cultural diversity. "By challenging the notion of development pushed forward by the logic of transnational expansion, partisans of self-reliance support the demand for a cultural identity and their own cultural field as a site for political emancipation." [Mattelart 1983: 24-25].

Externally, the strategy requires an exploration of joint economic initiatives and co-operation among regional countries or Third World societies. In this way, it is argued there can be a gradually reduced dependency on the developed countries and an increase in interdependent relationships and joint barganing among the underdeveloped countries. "Co-operation among these countries is aimed at generating or adapting knowledge needed for a socially relevant, endogenous, self-sustaining development process in order to avoid the blind or forced transfer of inadequate technology." [Hope 1983: 23]. Yet, as Amin noted, such co-operation faces daunting prospects, not least from industrialised countries who feeling threatened, resort to 'neo-protectionist responses, despite the liberal language.' [Amin 1990: 208].

Another difficulty which this approach is likely to encounter is the conflicting interests which often exist among Third World countries themselves, whether to do with competing export products, geo-political interests or sheer size. As occurred in the early stages of the negotiations over trade in services, some Third World countries may find themselves in alliance with the industrialised North on specific issues. In Hope's ideal framework, however, a harmonization of currently conflicting objectives and lasting solutions must be found and worked out in advance through a form of 'solidarity contract' which takes account of the individual requirements of countries with shared aspirations.

Unlike some interpretations of dependency, Self reliance does not posit the state as the sole or even dominant actor in the process of national development. In recommending it on this ground, Mattelart notes that it takes into account "the peculiarities of various groups making up a population or the specific contribution they could make in the drawing up of a balanced development policy". This requires "a vast process of popular organization and the political mobilization of the individual and the group... This solidarity, expressed through the realization of individual self reliance, is also expressed through collective self reliance at all levels: at the local level (family, commune, village federation, ethnic group); at the national and regional level." [Mattelart 1983: 24-25].

Synopsis

Whereas the clear (though not exclusive) emphasis of dependency is on international structural relationships, collective self reliance calls for the introduction of a new INTERNAL economic order as an essential corollary to global reform."Collective self reliance has therefore become inescapable for Third World countries. It is essential to their very survival and it is very much connected to the basic notion of reducing dependency. Collective self-reliance as a development strategy can hardly be understood outside the dependency framework. Self-reliance is the antithesis of dependency." [Hope 1986:23].

The concept of Self Reliance is not a new one, and may be viewed as part of the South-South initiatives which were embodied in demands for a new international economic order during the 1970s and 1980s. However, it acquires particular importance in a regional context such as in the Caribbean, as well as in a global context, in which resources for development aid from the North are already beginning to be re-directed to less developed economies of the North itself. For example, economic assistance once destined either through bi-lateral or multi-lateral channels to the under-developed South is already being shared with the several countries of Eastern Europe now viewed in a politically more favourable light by the industrialised capitalist economies.

Within Western Europe itself, the introduction of the Single European Act in 1992 will involve major revisions of traditional bi-lateral trading relationships with peripheries in the South. And, major changes in the Soviet Union as well as its new focus on ideas of a 'Common European Home' are also likely to involve reduced levels of assistance or less favourable terms to Third World partners, such as Cuba. In the emerging new political order, economically dependent and scattered territories of the Caribbean are likely to be forced into major internal adjustments and more substantial regional alliances.

1.4 - BRIEF CHAPTER CONCLUSIONS

We have attempted to present in the foregoing chapter some of the main theoretical issues raised by the interplay between an imperial state power and its corporate sector. We have also discussed the relationship of dominance and dependency involving a synergistic state/company relationship in the metropole, on the one hand, and the disparate, small and under-developed territories in the Caribbean periphery, on the other. Our examination of the nature and functions of the state sought to explore alternative theoretical perspectives through which the institutions of government and policy-making may be examined, and our analysis of imperialism provides both a theoretical and an historical frame of reference for the interactions.

We will return to these issues throught the thesis, but particularly in the concluding Chapter 9. There, together with a review of our main empirical findings, we will attempt a synthesis of the various theoretical strands, including our discussion in Chapter 4 of multinational corporations in the world economy and in the Caribbean.

However, we turn next to a close examination of the Caribbean as the main policy environment of our analysis. In Chapter 2, we will consider the region's peculiar geographical and political fragmentation, attempts at regional integration, and the consequences of indebtedness on Caribbean attempts at economic, political and communications de-colonization.

CHAPTER 2

THE CARIBBEAN: DEPENDENCY AND FRAGMENTATION

The territories geographically defined as being in the wider Caribbean region differ significantly in terms of size, colonial and ethnic backgrounds and political systems. This reflects a complexity derived not only from the naturally scattered, predominantly island configuration of the area, but also the history of European rivalries, conquest and political balkanization of the region. Massive enforced transfer of peoples from Africa under slavery and from Asia under the system of indentureship created diverse ethnic populations with their own varied cultural practices. The imposition of European values upon this mix, together with the economic exploitation of mining and agricultural products, incorporated the Caribbean area into the Western economic and political system for over four centuries.

A major consequence of these historical and geographical factors is the severe fragmentation of the Caribbean. One of the most obvious present-day indicators of this historical fragmentation of the wider region is language. Cuba, the Dominican Republic and Puerto Rico are Spanish-speaking territories with a combined population of close to twenty million people. The French-speaking Caribbean consists of the independent territory of Haiti and three French overseas departements: Martinique, Guadeloupe and Cayenne (French Guiana) with a total population of about 6 million. The Dutch colonies in the Caribbean include Suriname and the group of six islands called the Netherlands Antilles, all with a population of over 735,000 people. And, the former Danish colonies of St Thomas, St Croix and St John, now, like Puerto Rico, colonised by the United States, have a combined population of 103,000.

The English-speaking Caribbean, though collectively only the third largest population grouping with just over five million people, is the most numerous in terms of islands or individual territorial units. Although most of these units share a common history of British colonialism, the grouping can be further subdivided into those which have gained their independence and those remaining as British colonies or dependencies. Among the existing British colonies in the region are Montserrat, Anguilla, the British Virgin Islands, the Turks and Caicos Islands, the Cayman Islands and Bermuda with a combined population of 132,000 people.

Altogether, the wider Caribbean region currently consists of over 32 million people, distributed across 26 countries. However, the focus of this study is on the English-speaking segment which constitutes the Commonwealth Caribbean. And even within this grouping, the number of territories are sufficiently numerous as to necessitate the identification and targetting of

Figure 1


The Caribbean
UNITED STATES
Gulf of Mexico
THE BAHAMAS
TURKS and CAICOS
Atlantic Ocean
CUBA
CAYMAN ISLANDS
JAMAICA
HAITI
DOMINICAN REPUBLIC
PUERTO RICO
U.S. VIRGIN ISLANDS
ANGUILLA
ST. MARTIN
ST. BARTHELEMY
SABA
ST. EUSTATIUS
ST. KITTS-NEVIS
MONTSERRAT
ANTIGUA and BARBUDA
GUADELOUPE
DOMINICA
MARTINIQUE
ST. LUCIA
BARBADOS
ST. VINCENT and the Grenadines
GRENADA
TRINIDAD and TOBAGO
ARUBA
CURACAO
BONAIRE
MEXICO
BELIZE
GUATEMALA
HONDURAS
EL SALVADOR
NICARAGUA
COSTA RICA
PANAMA
Caribbean Sea
Pacific Ocean
COLOMBIA
VENEZUELA
GUYANA
SURINAME
FRENCH GUIANA

specific countries in our detailed treatment later. As a context for our discussion and in recognition of the close political and historical links within the anglophone region, it is useful to consider further some of the specific characteristics of this anglophone sub-region.

2.1 - DEMOGRAPHIC PROFILE

The independent, English-speaking territories of the Caribbean number twelve countries, which, together with Montserrat, form the membership of the Caribbean Common Market and Community (CARICOM). As can be seen on the regional map at Figure 1, the membership of this grouping is dispersed across some two thousand miles ranging from Guyana on the northern coast of South America through the state of Trinidad and Tobago in the southern Caribbean Sea, northward through an arc of smaller islands. These include Grenada, St Vincent, Barbados, St Lucia, Dominica, Antigua and Barbuda, and St Kitts-Nevis. Further north of this arc are the islands of The Bahamas, and south of these is Jamaica, with the territory of Belize located on the Caribbean coast of the Central American mainland west of Jamaica.

The four economically more advanced countries are Jamaica, Trinidad and Tobago, Barbados, and Guyana. These are officially referred to as the MDCs or More Developed Countries. Among these, Jamaica is the largest in population terms, with its 2.4 million people [1988] accounting for over half of the total population of the entire region. Trinidad is next with a population of 1.2 million [1988], followed by Guyana with a population of 700,000 [1987], and Barbados with 256,000 (1987). The Bahamas with a population of 241,000 (1987), is also among the more advanced economies of the region. But while being a member of the Caribbean Community, it does not participate in the Common Market aspect. Table 1 outlines the basic demographic statistics of the region, indicating a high level of population density, and showing the relatively small size of most of the territories.

Of the 8 less developed countries (LDCs) of CARICOM, Belize is the largest with a population of 152,000, followed by St Vincent and the Grenadines: 123,000; St Lucia: 119,000; Grenada: 110,000; Antigua and Barbuda: 77,000; Dominica: 74,000; St Kitts/Nevis: 45,000; and Montserrat the smallest with a population of 12,000.

The former British Caribbean region, therefore, consists of a scattered collection of relatively densely populated islands and mainland territories, located close to other mostly larger territories which constitute the peripheries of other European empires. In line with the analytical models of Johan Galtung, describing a 'feudal Centre-Periphery structure' [1981 :307], there is little or no contact between the British, French, Dutch, Spanish or American colonial peripheries, which although geographically close, are artificially separated by the colonial heritage of language, telecommunications channels and cultural traditions, all attuned to their respective Centre nations.

TABLE 1

DEMOGRAPHICS OF CARICOM MEMBER COUNTRIES

Country	Ind. Date	Population (1985)	Area (sq/km)	Density per s/km
Jamaica	1962	2,357,900*	10,992	213
Trinidad	1962	1,235,400*	5,128	230
Guyana	1966	788,000	214,970	4
Barbados	1966	250,000	430	581
The Bahamas	1973	230,000	13,935	17
Belize	1981	170,000	22,963	7
St Vincent	1979	110,000	389	283
St Lucia	1979	137,000	616	222
Grenada	1974	110,000	311	309
Antigua	1981	80,000	440	183
Dominica	1978	84,000	750	112
St Kitts	1983	44,000	269	161
Montserrat	(U.K. Colony)	12,000	104	115

Sources: Government Statistics 1988*
Commonwealth Secretariat 1985

2.2 - POLITICAL SYSTEM

The independent countries of the Commonwealth Caribbean are all multi-party parliamentary democracies modelled on the Westminster system. This is in keeping with the fact that they are all former British colonies. Of the 12 independent CARICOM member states, ten retain the British monarch as the titular head of state, represented by a local Governor General, with a Prime Minister as the head of government. Two, Guyana and Trinidad and Tobago, have adopted a republican status with a President as head of state and a Prime Minister as head of government. Both, however, remain members of the Commonwealth.

The process of decolonization began with the political independence of the largest of these territories, Jamaica, in August 1962. This was followed in the same year by Trinidad and Tobago, and four years later by Guyana and Barbados both in 1966. The gaining of independence for the other CARICOM member states occurred only as recently as the 1970s and 1980s, as outlined in Table 1. However, while a majority of territories have gained political independence, the process of decolonization in the region is still incomplete. Currently, the most active agitator for independence is Montserrat, but its efforts suffered a recent setback with a decision in London to revert the island's status from a self-governing to a Crown colony with direct rule from London through the offices of an expatriate Governor.

According to Stone [1986:15] the range of countries in the Caribbean Basin can be distinguished politically by three main sets of attributes. These he summarised as Democratic Pluralist, Authoritarian and Populist-Statist. In his classification, most of the states of the Commonwealth Caribbean stood within the democratic pluralist grouping by the end of the 1970s. The attributes of their political category included a participatory political tradition, strong civil rights and moderate social rights, freedom of association on voluntaristic and autonomous bases, the promotion of dissent and moderate initiatives towards reform within the system.

While we agree that many states in the Caribbean continue to have these attributes, the most typical feature of political decision-making would appear to be the dominant role of elites, with any broad participatory role in state decision-making being confined to periodic electoral activities. In an earlier publication, Stone himself underlined the pivotal role played by both local and foreign power elites in public affairs in Jamaica, arriving at judgements which are broadly applicable elsewhere in in the region: "policies are formulated by party leaders in government, in collaboration with civil service advisors and specially appointed party advisors and consultants. The latter has assumed increasing importance in the 1970s, replacing civil service advisors in various sensitive policy areas. Certain policy areas involve joint decisions between these local decision-makers and foreign institutional interests such as the World Bank and the IMF, who often determine policy emphases and direction by their control over financing." [Stone 1980: 75].

Since the 1970s however, a greater degree of ideological variation and experimentation has been introduced in some territories of the anglophone region. Between 1974 and 1979, Grenadian Prime Minister, Eric Gairy introduced authoritarian rule by subordinating the parliamentary and electoral systems to his own personal directives. His personal usurpation of the broader role of the capitalist state, limited the scope for capitalist development, and for legal political opposition. The regime was overthrown in 1979 and replaced by the revolutionary socialist government of Maurice Bishop. According with Stone's classification, the new Grenada regime was participatory, with a self-imposed mandate for transformation and the promotion of national unity. The political method of this regime, however, involved the suspension of certain traditional civil liberties under revolutionary conditions, and the incorporation of societal group interests into a vanguard party.

This social experimentation, the first of its kind to gain power in the English-speaking Caribbean, led to a substantial reduction in unemployment, increased productivity and in the use of local resources. It made exemplary advances in social services such as public transportation, health and education. [See Steve Clarke in Bishop 1983: xxii-xxv]. This new political experiment also led, however, to increased hostility from the neighbouring superpower, the United States of America, which excluded Grenada from regional economic trade and aid arrangements such as the

Caribbean Basin Initiative (CBI). Grenada developed alternative relations with Cuba and the eastern bloc, but these served to polarise the regional integration movement and to further isolate the tiny island-state from both its CARICOM neighbours and the U.S.

These pressures were soon reflected within Grenada itself, with ideological factions developing within the ruling party and national leadership. The situation deteriorated further with the execution of the Prime Minister, which was followed by a US-led military invasion with token participation by certain other CARICOM member states in 1983. Since then, the country has resumed a liberal elitist character, with deteriorating social and economic conditions but under greater political and military hegemony of the United States.

To varying degrees, similar experiments were attempted by the Michael Manley Government in Jamaica between 1974 and 1980 and by Forbes Burnham in Guyana between 1967 and 1985. Domestic ideological policies of socialism were declared alongside a non-aligned foreign policy. The emphasis was on a strengthened state sector as the leading engine of development, with carefully defined conditions and areas for foreign investment. The decade of the 1980s, however, saw the demise of such state-centred development approaches [Thomas 1988: 210]. This was effected again through economic isolation, stringent demands for reforms by the International Monetary Fund in exchange for foreign currency loans and credit clearance, as well as by direct U.S.

political and military pressures, and internal disjunctures between the state and counter elites in the political and other spheres.

In the aftermath of these experiments, the result has been a resurgence of the status quo, in the form of a regionally more uniform, pro-capitalist traditional society, internally dominated by foreign and upper class elites, with a marginalization of any radically distributive or revolutionary approaches to national development. In many territories traditional policies mean reinforced domination by the white economic elite and a more receptive environment for large transnational enterprises. The two other major regional territories, Trinidad and Tobago and Barbados, have to varying degrees maintained a continuity with the traditional socio-political system which the experiments in Guyana, Grenada and Jamaica attempted to challenge in the early post-colonial period.

The approaches within the traditional political framework, however, have been differentiated, being implemented under varying degrees of regulation, ranging from advanced economic nationalism in Trinidad and Tobago, through the conservative but pragmatic policies in Barbados, to the largely open, unregulated economies of most of the small eastern Caribbean states. Within this grouping of established conservative states, economic power resides firmly in an alliance of large foreign corporations, particularly in the banking, mining and tourism sectors, and a small local, mostly white, elite.

These dominant sectors are serviced by an aspiring professional and bureaucratic, largely black middle class, which has performed the leading role in day-to-day political government. Among the majority of the region's population, however, made up of peasant farmers, small traders, workers and the unemployed, an increasing political consciousness and harsh economic conditions are giving rise to new, localised and regional initiatives in the non-governmental (NGO) sector, aimed at a greater degree of self-reliant social and economic existence. It is this portion of the population, by far the largest and internally most dynamic, which are least served by existing telecommunications arrangements.

Synopsis

Despite the end of formal colonialism as a prevalent practice in international relations, it is clear that the process remains incomplete in the wider Caribbean region, and its effects are still very pervasive even within those states which have gained political independence. In the english-speaking part of the region, with which we are primarily concerned, these effects of colonialism combine with physical fragmentation and small size to contribute to the maintenance of an environment of continued dependency and acute political vulnerability.

The experiments in Grenada, Guyana and Jamaica between 1967 and 1985 represented attempts to re-structure this socio-political order. However, the experience of these countries provides a number of indications of the problems faced by radical national transformative initiatives within the geo-political and historical contexts of imperialism and neo-colonialism in the Caribbean. In the first place, the fate of such initiatives demonstrate the weakness and vulnerability of the state in the periphery, in relation to external economic, political and military forces. Although substantial social and economic transformation can be achieved in the region without operating directly within the political parameters of the United States or Britain, such bold initiatives in the Caribbean run the risk of military repression or long-term economic strangulation by these powerful interests in the global north. This appears particularly to be the case where local interest organizations among the people are weak, or where there are major divisions in the state or national leadership.

2.3 - SIZE AND ECONOMIC VULNERABILITY

As we have seen, individual Caribbean states today are as vulnerable to external military aggression from the United States as they were to the European conquistadores of the fifteenth and sixteenth centuries. A major part of this traditional vulnerability is the structural factor of size and the geographically scattered nature of the regional territories. If these factors are important impediments to strong political development, they loom even larger over the economic and communications prospects of the region as a whole.

Despite a total land area of about 271,400 square kilometres the aggregate population of the region under review is just over five million people distributed across a large number of states. According to the 1985 Report of the Commonwealth Consultative Group On Small States, population provides the most effective basis for defining the size of states. The same criteria was independently employed by the United Nations Institute for Training and Research (UNITAR) in its study of 'Problems of Very Small States and Territories'[1969]. Both the U.N. agency and the Commonwealth Consultative Group use a cut-off point of one million people as the defining feature of a small state.

On this basis all but two of the CARICOM member-states are by definition small states. The Commonwealth study further classifies states with populations below the million mark as mini-states and those with populations below 100,000 as micro-states. According to this scheme, four CARICOM member states: Antigua, Dominica, St Kitts-Nevis and Montserrat are in the minimum category of 'micro-states'. Another seven could be classified as mini-states, while Trinidad and Tobago which falls just outside of this category and Jamaica, the largest of the territories, are still in global terms quite small states. This situation, with such a high concentration of very small states, constitutes a unique feature of the Caribbean region in global terms.

A major significance of smallness in global relations is the vulnerability which it may accord in the economic, political and military spheres. As we have seen such countries are particularly at risk where they adopt policies out of keeping with the demands of the industrialised capitalist world, and in particular, the regional superpower, the United States of America. But they are also vulnerable in relation to the financial strength and private decision-making machinery of individual multinational corporations whose global budgets often dwarf the national budgets of many of these states. The Commonwealth Consultative Group drew special attention to such vulnerabilities:

> "In general,Third World states tend to be in a disadvantageous position in relations with transnational corporations through inadequacies in negotiating skills and access to information; and with their slender human resources, small states are in an even weaker position than other developing countries. In many cases, the agreements transnational corporations draw up may be said to resemble those 'unequal treaties' that imperialist powers used to impose in earlier centuries upon weaker nations. The crucial issue for small states is to avoid inequitable contractual arrangements and political interference." [1985:56]

Despite these dangers, the Report points out that TNCs can nonetheless make an important contribution to such states in providing much needed capital, technology and market outlets.

Besides the potential impact of major private corporate interests, the inability of the small states by themselves to benefit from economies of scale is among the wider economic disadvantages which small societies face. 'Industrialization' for example, 'is constrained by...the small size of domestic markets, difficulties in penetrating foreign markets, the absence of a favourable industrial environment, lack of an indigenous technological base and inadequate supplies of local raw materials for processing industries' [Commonwealth Group Report 1985:17]. In micro-economic terms, Pantin observes that "small size implies that in virtually every instance, the minimum economically efficient scale of plant will yield output greater than domestic demand. The need to export, then, entails that firms involved will be exposed to the full force of global competitive markets, and protectionism." [Pantin 1989: 278].

This assessment has a particular implication in telecommunications and other technology-based sectors. The small technical and economic base of the individual countries or the region as a whole severely limits the prospect of indigenous research and development. This in turn leads to a sometimes uncritical acceptance of foreign capital and expertise, whose technological input is used as a major negotiating factor for deepening both external ownership and control.

All of the constraints identified are applicable not just to the individual small states in the Caribbean but also to the region taken as a whole. In 1988, the Caribbean Development Bank (CDB) reported that performance for that year was " generally lower than in 1987 and was indicative of stagnation in some of the major regional economies." The Bank's Annual Report noted further that "the projected slowdown in growth performance in OECD countries is expected to contribute to a sizeable decline in the volume of world trade. Such a development would further adversely affect the dependence of the region on trade in primary commodities."

This report by the CDB is an indication not just of the pattern in an isolated year, but reflects the structural economic dependency of the Caribbean region. The region exports sugar, bananas, cocoa, citrus and other crops mainly to markets in Europe and the United States, from which it imports finished goods and processed foods. Tourism is a long standing and increasingly important foreign exchange earner. Mineral production, confined mainly to bauxite and alumina from Jamaica and Guyana and petroleum from Trinidad and Tobago, is dominated by transnational corporations and real earnings fluctuate according to world market prices. Light manufacturing in the more developed territories relies heavily on imported fuels and raw materials which are purchased with scarce foreign exchange.

> "Transnational corporations with global interests have taken charge of industrialization rather than

Caribbean capitalists with local economic interests. Like the European conquerors, their goal is to create wealth for themselves -- Caribbean development is a lesser priority. Thus the region produces very few of the inputs in its finished products. Instead, it imports raw materials and semi-finished parts and assembles them for export. Its industries depend heavily upon external capital, technology and markets. As in the colonial era, the Caribbean continues to shape its productive system to the demands of others." [Schuyler 1988: 5].

Fiscal and foreign exchange revenues generated from this economic structure are invariably unable to finance any major, systematic development in social services such as health, housing telecommunications and education. Internal migration from rural areas to the towns is spurred on by the absence of employment, social amenities such as electricity, pipe-borne water supplies, public transport, telephones and recreational facilities. These amenities, even where they exist in the urban areas, are mostly overstretched and in disrepair, or alternatively inaccessible to low income or unemployed sectors of the population.

2.3.1 - Debt and Economic Bondage

Over the last decade, economic conditions in the Caribbean have been exacerbated by the accumulation of massive external debts. These debts began to build up following increases in the price of oil introduced by the Organization of Petroleum Exporting Countries (OPEC) in 1973. By 1975, the price of this critical resource had increased four times over and with it the foreign exchange requirements both to buy the commodity and to import the many oil-based raw materials and consumer products needed by the economy.

According to Girvan et al [1989:ii], total CARICOM debt by 1980 was US$4002 million requiring an annual debt servicing of US$672.3 million. By 1988, however, this level of indebtedness had more than doubled to US$9802 million. This meant a debt per capita in the Caribbean of US$1634 million and an annual debt service of US$1161.8 million. Within the English-speaking region, the debt owed by Jamaica looms largest, totalling$4.5 billion, or more than half the regional total in 1989. This level of indebtedness translates into a national per capita debt of some US$1,800, in a country where most of the employed population earns less than US$1100 a year and where there is an official unemployment level well in excess of 20%.

This precarious situation for the Commonwealth Caribbean occurs in the context of the overall debt crisis facing countries of the global south.In Latin America alone, foreign indebtedness exceeds US$430-billion, of which the single country of Brazil accounts for US$115-billion, or just under a quarter of the Latin American total. Girvan et al (1989:3) have pointed out, however that there are important structural differences between the debt owed by the larger Latin American countries and that owed by the smaller countries of the Caribbean and Central America. Unlike the situation in South America, the greater proportion of Caribbean external debt is owed to official agencies and governments, like the International Monetary Fund (IMF), the World Bank and the United States Agency for International Development (USAID).

A major implication of this situation is that the repayment and rescheduling arrangements for the majority of Caribbean debt is far more inflexible than for the major South American economies. This is because whereas the bi-lateral credit arrangements between debtor countries and commercial banks are open to re-scheduling, the multilateral sources such as the IMF and World Bank have not been willing to enter into any significant re-scheduling arrangements. The small countries of the Caribbean and Central American, for whom these agencies are the primary creditors, often have to negotiate additional loans rather than re-structure or re-schedule existing ones. This leads to further indebtedness and an increasingly high outflow on debt servicing. It also leads to increasing dependence on transnational tax revenues or new investment to finance budget gaps and meet borrowing conditions set by the multilateral lending agencies.

According to a 1989 global survey by the Organization for Economic Co-operation and Development (OECD), repayments on past IMF international lending exceeded disbursements by some US$3-billion, although IMF concessional lending, which reached

US$ 1.2 - billion in 1989, had improved sharply. The survey pointed out further that political changes in the Soviet Union and Eastern Europe could lead to even more difficulties in access to concessional credit for the debt-ridden countries of Latin America, the Caribbean and sub-Saharan Africa. [OECD 1989 Survey: Financing and External Debt of Developing Countries, Paris, 1989]. One net effect of these developments is a strengthening of the role of multinational corporations and private capital in the economies of the Caribbean region.

At a global level, the enforced debt repayment to multilateral agencies are effected by the use of a range of 'conditionalities' and penalties, including withdrawal of scheduled loan tranches if pre-set performance targets and repayment arrangements are not met. In the case of the World Bank, demands have included divestment of state-run enterprises, including telecommunications and other public utilities, and the employment of foreign expertise for the implementation of certain Bank-aided projects [Worrell 1989: 71, Jefferson 1989 :53].

Because existing policy in the industrialised countries now favour private operation of telecommunications and other public utilities, lending levels to the state sector for these industries have remained very low. Where regional countries such as Jamaica or Trinidad and Tobago are faced with infrastructural deterioration in these sectors, they are left to resort to the sale of telecommunications assets and equity to multinational partners such as Cable and Wireless. Discussing this dilemma in

TABLE 2

SELECTED ECONOMIC INDICATORS (MDCs)

Country	Per Capita Debt 1988 US$ Mn.	Per Capita GDP 1988* US$ Mn.	Unemployment Rates 1988
Jamaica	1,839	1,351	19%
Trinidad	1,782	3,699	21%
Barbados	2,945	5,740	17%
Guyana	2,244	547	20% (1980)

Complied from ACE, CDB and Caricom Statistics
*Current prices

its wider macro-economic context, Frobel notes:

> "One tactic among several forced on countries in such straits is to try and transform external debt into foreign-owned equity by selling national assets at cut prices, providing golden opportunities for TNCs to expand in debt-ridden developing countries. In addition, a number of formerly more reluctant Third World (and other) countries are now abolishing many of their remaining restrictions and controls on foreign investment, at the same time increasing other incentives to attract TNCs" [Frobel 1988: 64].

In the field of communications, the disposal of such assets to overseas interests represent the surrender of a major element of sovereign control over key instruments of autonomous national and regional development.

2.4 - THE HISTORICAL CONTEXT

The inclusion of this brief historical sections provides a useful reference point to the current social composition of the region and the early role of non-regional actors on present structures and policies. The situation, for example, before the arrival of the Spanish in the region provides a useful context for understanding how the direction and pattern of communication channels were altered by this new European presence. Outlining the circumstances of British ascendency and later dominance also assists us in better understanding the impact of intra-European rivalries and national imperial policies.

Very little is known of the signalling methods and long distance communication techniques of the early dwellers of the region, the Arawaks and Caribs who began to inhabit the Caribbean from about 700 AD as migrants from the tropical rain forrests of South America [Claypole and Robotham 1980:5]. However, archeological evidence suggests the early use of towers, streams, wooden trumpets and the blowing of special shells from the sea. According to Peter Martyr, later arriving European explorers discovered many implements to suggest an organised civilization among these peoples, particularly the Arawaks: 'They even discovered...many books', and, 'It is supposed that the natives preserved in these books their laws, the ritual of their sacrifices and ceremonies, astronomical observations and the precepts of agriculture' [Martyr 1912: 12-18].

The first Europeans arrived in the Caribbean about 800 years after the Arawaks and Caribs had settled in the region. Christopher Columbus, sailing under the sponsorship of the Spanish Crown, arrived in the late 15th century and laid claim to the entire region. This arrival was to mark a dramatic change in both the direction of human communication and travel hitherto existing in the area, as well as in the technology of transportation and warfare. Consistent with his mission of trade and conquest, Columbus engaged the initially trusting natives in battles, plundering gold and other valuables to take back with him to Europe.

The Arawaks and especially the Caribs resisted. But without a developed military tradition and comparable weaponry such as gunpowder possessed then by the Spanish, their defence proved inadequate. The great majority of Arawaks were killed, many fled and some committed suicide rather than be captured in these resistance wars. Those Arawaks who survived the early onslaught in the Northern Caribbean were savagely enslaved, overworked in the clearing of woodlands and eventually driven into extinction [Sunshine 1973:10].

The Caribs in the east, in contrast with the Arawaks, were more skilled and resilient fighters. Early attempts to capture the islands of St Lucia and Grenada had to be abandoned in the face of unrelenting resistence. This ensured the survival of small enclaves of Carib people in these islands as well as in such territories as Guyana and Surinam [Hart 1970:15].

Synopsis

These wars and the unyielding defiance by the region's early peoples, were to mark the start of close to five centuries of Caribbean resistance to the cultural, political, military and economic power structures of Europe and the global North. In the contemporary era, dominated by advanced technology, the parallel struggles are against what McPhail describes as 'electronic colonialism'[1987:55-56], or what Schiller calls 'Cultural

Imperialism' [1976:9].

In the pre-Columbian era, the direction of human traffic, trade and communication were towards the highly developed civilizations of South America. The intervention of European imperial powers and their heinous system of slavery changed this direction irreversibly and determined the cultural, economic and political systems which now characterise the region.

The very beginning of this process of domination through military pressure initially, then by physical slavery and later through technology in the Caribbean, can be charted from the arrival of European populations, their conquest and settlement of the region and the enslavement of the aboriginal peoples, despite their heroic resistence.

2.4.1 - European Settlement and Rivalry.

At the same time, major European countries were themselves at war to establish regional supremacy. According to Odell, "..there developed from the seventeenth century onwards a geographical extension of European conflicts to the Caribbean, so that many territories in the region changed hands, often several times. The strategic and political interests of different European nations were thus reflected locally. Later, once the pattern of ownership became fixed, the European nations also created contrasting developmental patterns arising from different motives in their colonization. For example, for Britain, the

Caribbean territories were viewed in economic terms. They were solely and simply providers of tropical products grown mainly on plantations run by a white aristocracy." [Odell 1972:21].

Within the Caribbean, the capture of Jamaica in 1655 marked the start of a greater direct control by the British government in London over affairs in the region. Until then, control of captured territories was entrusted to loosely directed 'proprietors', acting mainly on their own initiative for private gain. In 1660 central authority was strengthened by the establishment in London of the Council for Trade and Plantations, the forerunner to the Colonial Office.

If the coming of the Europeans influenced the imperial allegiances and communication directions in the Caribbean, the enforced entry of a large African population was to determine the majority ethnic composition of these societies, as well as the profitability of the economic enterprises launched by the Europeans.

Unlike the Spanish in search of gold, the English settlers realised from the outset that cultivation of the land and the export of tropical products to Europe was to be their main source of wealth creation. Their first venture was the production of tobacco for a European market in which the inhaling of snuff was becoming a fashionable habit among the upper classes. By the middle of the seventeenth century, however, tobacco production could be undertaken far cheaper in the British North American colony of Virginia. A slump in prices caused by overproduction drove the less efficient, smaller scale producers, such as Jamaica and Barbados, out of the export market for tobacco, even while production of cotton and other crops was similarly threatened with competition from the American mainland colonies.

The survival of the British colonists in the Caribbean and their economy demanded the production of an alternative crop. In 1670, the British Governor began the active promotion of sugar cane production as an economic enterprise in the biggest of the British colonies, Jamaica. This was later to spread not only to most of the other British colonies, but to French and Spanish colonies as well.

2.4.2 - Slavery and the Plantation Economy

The shift from tobacco and other small scale crops to sugar cane, had a profound effect on the colonial economy and society of the Seventeenth century Caribbean. Whereas tobacco production could take place on a small domestic scale, sugar production by its nature is extensive, requiring industrial investment in land, capital and most of all in a large labour force to plant, care, and reap the cane plant and then process and package it into exportable sugar. For this undertaking, extensive land re-distribution was required, which led to the creation of large self-contained production units.

This shift was to mark the beginning of what Beckford [1972] described as the 'Plantation Economy'. It meant the establishment of a white upper-class, land-owning plantocracy, whose members did not enjoy that status while in England. Many poorer white settlers: political exiles, debtors and other white bondsmen transported from Britain, formed the initial workforce and lower social classes. Soon, however, this source of labour proved insufficient to cultivate large tracts of sugar lands. An alternative workforce was then necessary if production was to be maintained on a large and expanding scale.

This led to the intensification of a trade in African slaves which had been started in the region by the Spanish over a century earlier in 1518. By the middle of the Seventeenth century, the slave trade was the main source of labour for the colonial plantations of the British in the Caribbean.

To the British planter class and in the eyes of the colonial policy makers, the slaves being imported were mere chattel and livestock in the possession of estates. Both in their transportation in the so-called 'Middle Passage' from Africa to the Caribbean and in their treatment on the estates once bought, the overwhelming majority of slaves were overworked, whipped, mutilated or routinely killed in punishment. Curtin estimates that between 1690 and 1700, of every 100 Africans taken aboard ships of the Royal African Company for enslavement in the New World 23 died en route [Curtin:1969].

Those who did arrive had no representatives or role in the civic affairs of the colonies despite being in the majority in the region within less than a decade of the start of the sugar plantations. According to Gardner [1872], the total number of slaves imported into Jamaica alone was more than a million, of which some 200,000 were re-exported.

For the growing population of African slaves, long distance signals and communication methods were essential in organizing resistance on a scale wider than individual plantations, or to summon social gatherings during rare breaks in the work schedules. Hart notes that the primitive telecommunications needs for military operations by the slaves were met by the use of the 'abeng', a shell from the sea adapted to make a series of shrill sounds, or alternatively the 'aketty', a similar device.

These telecommunications devices were used particularly by the Maroons who were organised groups of escaped slaves who fought a successful series of resistance wars against British troops in the mountains of Jamaica. In many of these battles, the 'abeng' and the 'aketty' proved decisive: "The Maroons placed a scout within the cave where he could hear the echo of the footsteps as the soldiers trod on the stone. When the echo ceased the scout knew that the last man had entered the trap, and emerged from the cave to sound the 'aketty'. Entirely surrounded, all the soldiers were killed." [Hart 1985:96]

For calling social gatherings, as well as transmitting coded messages of other types, slaves within the estates attempted to use their African drumming as a communication device. "It was obvious to the plantation owners that the practice was potentially subversive of their social regime, since the slaves, using their 'primitive' technology were able to communicate with each other at a distance in a language that was incomprehensible to the plantation owners but which was quite comprehensible to themselves." [Brown 1984:4]. Predictably, the response of the plantocracy to this situation was the banning of all drumming on the estates and the active discouragement of the use of any other langauge but English among the slaves.

The slave populations in the region had no rights in law, and the only recourses open to them in the face of oppression were submission, escape or risking the consequences of organised resistance. Like the Arawaks and Caribs before them, large numbers of slaves opted for resistance in defence of their humanity. This led to a vicious cycle of greater brutality by an increasingly outnumbered and insecure ruling class, which in turn fueled more resistance and repression. Birth and death and census figures presented to the Jamaican Assembly in 1831 suggested that the slave population was declining at the rate of 1000 a year.

Part of the insecurity which bred this level of brutality on the part of the slave masters was the difficulty of rapid communication with the imperial centre which was the source of their power and support. They felt a profound sense of isolation both numerically within the colonies and in their capacity for rapid troop reinforcements during the frequent military crises with which they were faced. The need for rapid communication both between colonies and across the Atlantic was becoming more and more vital. The communication of new laws, colonial directives and the responses to these, all of which took several weeks by way of ships, was becoming intolerable as the sole means of long distance communication then available across the Atlantic. Within the colonies themselves, couriers on foot or horseback, while being the fastest available means of internal communication, were also highly vulnerable in the siege situation faced by many colonial administrators.

But despite the limitations, resistance and brutality, the slave trade and the use of slaves in the West Indies formed the single most important source of external earnings by the British economy in the late Seventeenth and during the Eighteenth centuries. According to Eric Williams:

> The slave trade kept the wheels of metropolitan industry turning; it stimulated navigation and shipbuilding and employed seamen; it raised fishing villages into flourishing cities; it gave sustenance to new industries based on the processing of raw materials; it yielded large profits which were ploughed back into metropolitan industry; and finally it gave rise to an unprecedented commerce in the West Indies and made the Caribbean territories among the most valuable colonies the world has ever known [Williams 1970:148].

He noted that the 'Triangular Trade', in which European manufactured goods were transported to Africa to be traded for slaves which were then taken for sale in the West Indies in exchange for European-bound sugar, accounted for 21% of British imports, 8% of exports and 14% of total external trade [Thomas 1988:21].

It was not until the early 19th century that the Caribbean colonies began to yield less lucrative returns for both private planters and the British economy as a whole. The downturn was in part the result of strong competition from the larger French colony of San Domingue and partly the result of frequent, violent and costly slave revolts. In England and elsewhere in Europe, pressure from an emergent manufacturing bourgeoisie and from religious and humanitarian allies in the Church led to the abolition of the British slave trade in 1807 and of slavery itself in the British colonies by an Act of 1833, but to take full effect only in 1838.

Synopsis

The arrival in the Caribbean region of large numbers of African slaves transformed the sociology and economy of the region from one of a settler colony of Europeans to a capitalist agro-industrial economy with a vital link into the British economy. The enslaved majority devised their own communications methods and forms of resistance. This increased the physical insecurity and social isolation of the slave-owning minority of Europeans and their need for a rapid and reliable means of communications with Britain. As an expression of this insecurity, they resorted to methods of extreme brutality to enforce conformity and to help secure a sustained period of profitability for British investors.

According to Hart, 'capital accumulation from the slave trade and the production and distribution of sugar from the Caribbean area had helped to finance the development of the technological inventions of the Industrial Revolution, thereby stimulating the growth of the British economy' [Hart 1989:3]. There appears to be little doubt, therefore, that the early motivation for the British state's involvement was an economic interest in raw materials produced under conditions of slavery in the region. Later, however, when the slave trade had been abolished and the once lucrative sugar plantations entered their first period of decline, the region's strategic location emerged as being of paramount importance to the geo-political interests of the European imperialists.

Among the technological inventions developed in Europe during the Industrial Revolution was telegraphic cable communication. This new technology opened up new investment opportunities in Europe and the colonies, and provided the imperial authorities in England and their local administrators in the colonies with a potentially valuable new instrument for long distance communication. It offered a relatively rapid response capability in times of mass revolts and greater overall control over the colonial empire. The early development and subsequent expansion of this new telecommunication network will be discussed in Chapter 3 of this study.

2.5 - NATIONALISM AND DECOLONIZATION

The period following emancipation in the Caribbean was marked by further severe economic hardship for the majority of the populations. But that era also saw a social re-organization of the society. As was to be expected, large numbers of ex-slaves left the stifling confines and bitter memories of the sugar estates to establish their own small plots and communities. This simultaneously created a stratum of peasant proprietors and precipitated a severe labour shortage within the established plantation system. The plantocracy responded with efforts at re-structuring production methods and with the introduction of a new stream of immigrant labourers. The majority of these were Indian indentured workers, who arrived in the period from 1854, going mainly to Trinidad and the then British Guiana (now Guyana).

It is this phase which created in these two territories the current approximate numerical parity between African and Indian eitnic groupings. Later, an attempt was also made to recruit Chinese immigrants, but this took place only on a much smaller scale and confined to Jamaica, Guyana and Trinidad. These efforts at meeting an immediate economic problem were to permanently alter the race and class composition of a Caribbean society once composed mainly of European and Africans.

These efforts, however, did not avert a severe economic crisis across the region, persisting through most of the century following emancipation. The plantation owners were constrained by the continued existence of the Navigation Acts which obliged trade by British colonies to take place exclusively with Britain using British ships. Muscovado sugar from the West Indian colonies entered Britain under special monopoly arrangements which gave the region's planters important advantages. However, by the mid-Nineteenth century European beet sugar began to compete commercially with cane sugar and both the Navigation Acts and the special preferential duties of West Indian sugar were beginning to be considered as impediments to the expansion and freedom of British industry.

In 1846, the Caribbean plantocracy, their beneficiaries and paid lobbyists in London received a severe blow with the introduction of the Sugar Duties Act, under which the special arrangements were abolished. Three years later in 1849, the Navigation Acts were also abolished, signalling the beginning of Britain's disengagement from the West Indian sugar industry from which it had gained so much.

Within Westminster itself, the last half of the nineteenth century was also a period of active debate over whether the whole empire should not be dismantled. Under Gladstone and the

Liberals, the idea of 'separatism' became current in support of the view that the colonies were now millstones around the neck of an industrially retooled and emergent Britain. A Select Committee of the British Parliament was appointed in 1870 to re-examine colonial policies, following which the Colonial Office reaffirmed that the empire would not be separated, but each component would have to become more self-reliant: "Self-reliance does not mean separate existence", Arthur Knatchbull-Hugessen of the Colonial Office, is reported to have explained in 1871. "A colony may be great and self-reliant, and still maintain an intimate connection with the mother country. The government wish to retain them bound to this country by ties of kindred and affection." [Barty-King 1979:37].

In practice, the new ties in the colonial relationship with the imperial centre was to be effected with the then emerging technology of the telegraph. Not only was it to be the instrument of 'maintaining an intimate connection with the mother country', but also a major alternative area of British capital investment to the now declining sugar plantations. According to the London Times of August 26. 1869: "There can be no doubt that the most popular outlet now for commercial enterprise is to be found in the construction of submarine lines of telegraph."

But if Britain, for its own economic objectives, saw advantages in re-structuring economic relations within the Empire, so too did the more enterprising planters in the West Indies. Additional market outlets in the United States and France were secured, and overall, a collapse of the West Indian sugar industry was temporarily averted, although many inefficient estates ceased operation. For the emergent black majority populations, however, it was a period of self-discovery in conditions of economic deprivation and social squalor. These efforts culminated in major waves of social upheaval which swept the region in the Great Depression of the 1930s, upheavals which were to form the cradle for the modern development of the region through the establishment for the first time of indigenous political, trade union and social institutions.

These institutions, many under the leadership of radical nationalists, hastened the arrival of internal self-government, and Universal Adult Suffrage which was achieved by the people of the region in 1944. Close to twenty years later, the campaign for full political independence for the larger territories started to gain ground, as the economic relations with Britain began increasingly to take second place to trade with the United States and Canada. Notwitstanding the absence of any re-structuring in the basic primary agricultural character of the economies, the discovery of oil in Trinidad and bauxite in Jamaica contributed to new optimism and seemed to increase the prospects of greater self-determination both at the national and regional levels.

Synopsis

For the rising industrial bourgeoisie in Europe of the mid-nineteenth century, sugar, slavery and the plantation economy had become a redundant and burdensome vestige of a passing era. The dominant influence of the new industrial class in the British Parliament, and the agitation of slaves led to the abolition of slavery and a re-structuring of the plantation economy. In the english-speaking Caribbean, these developments ushered in both a period of severe economic depression as well as the inauguration of new institutions which were to become the foundations of self government and later of political independence in the region.

2.6 - REGIONAL INTEGRATION SCHEMES

In these circumstances, British colonial policy-makers saw the possibility of off-loading the multiplicity of West Indian colonies under an independence arrangement which involved a federation of all the small with the larger territories as a new unitary state. The massive physical distances between the component parts, wide disparity in standards of living among most LDC and the MDCs, the production of largely similar primary crops in competition for the same external markets coupled with strong internal nationalism were all placed at a secondary level to the convenience of a neat federal experiment.

Numerous previous attempts at federation took place on a smaller scale from as early as 1800, the primary aim being to reduce the administrative expense of so many small colonies. Those attempts foundered oweing to physical distances, ethnic and historical incompatibilities and problems of communication.

Within three years of operation between 1958 and 1961, the latest and most ambitious attempt at political union, called the West Indies Federation, also collapsed.

Jamaica, the largest of the member-states, was the first to withdraw, following a referendum on the issue in 1961. Popular sentiment then, was in favour of national independence, which was secured from Britain in 1962. The withdrawal of Trinidad and Tobago followed, and it too secured its political independence in 1962. The departure of the two major member countries was decisive and Federation was officially disbanded, with a majority of the remaining territories also securing political independence in the succeeding two decades.

The collapse of the colonially designed federal scheme, did not indicate a permanent rejection of regional integration. However, the succeeding regional relations and integration systems inherited a legacy of suspicion, thinly veiled competition and narrow nationalism which had so fatally beset the Federation. In particular, the less developed countries regard with some distrust the more developed ones, and seek to negotiate extra-regional third party arrangements as a buffer against over dependence on MDC leadership and control. And among MDCs themselves internal policies and commitment towards advanced regional co-operation is often overshadowed by a fear of mass migration from the LDCs and demands for heavy contributions to their development needs. Among both groups of countries, the extent of support for advanced schemes of integration vary with the particular political party or even political leader in power.

In the era of independence, following the failure of the Federation, the first moves towards regional co-operation were loose economic-based arrangements. Unlike the Federation, these and succeeding initiatives have been gradual, extensively discussed within the region (as against imposed from outside) and have moved from the most basic towards more advanced systems of integration. The movement of this process conforms with Lynn Mytelka's theoretical model of the stages of regional integration among Third World neighbours, and Axline's [1989] elaboration of this model.

Mytelka [1975] presents three ideal types of integrative schemes, each more advanced than the former, and defined by the developmental policy measures which comprise it. The Type 1 model constitutes a loose commercial arrangement within a free trade area and a customs union. Derived from early European trade liberalization schemes, this first model aims primarily at increasing intra-regional trade flows. Applied in conditions of underdevelopment and uneven resource distribution, it is regarded as leading to severe trade imbalances, economic polarization and internal dependence. These factors give rise to instability and eventually to even greater disunity.

The Type 2 model incorporates all the policy features of the more basic scheme, but seeks to correct its distributional deficiencies. Its corrective measures involve compensatory and regulatory machanisms such as special solidarity funds, the establishment of development banks and other means of spreading more evenly the benefits of integration. The Type 3 integration model builds upon the two previous co-operation systems but goes beyond them to the introduction of measures to limit dependence on external actors such as transnational corporations and governments of the industrialised countries. Policy measures include a regional regulatory regime for foreign investment, collective development planning at region-wide and sectoral levels as well as more advanced mechanisms of re-distribution.

In analysing these three basic linked approaches to integration in conditions of under-development, Axline argues that a Type 3 scheme is more likely to achieve the development goals of regional integration than Types 1 and 2. This conclusion is somewhat self-evident as the Type 3 scheme also incorporates and deliberately tackles the problems implicit in the preceeding two. More significant, however is the conclusion that the Type 3 scheme requires a higher level of political consensus and direction with a correspondingly more complex consultative and decision-making structure.

Examined within the framework of this model, the modern movement towards Caribbean integration began with a regional Type 1 scheme. This was the creation of the Caribbean Free Trade Association (CARIFTA) in 1968, built as much on the foundation of some post-federal residue of regional identity as on the potential threat newly posed by Britain's application for entry into the European Economic Community (EEC). The success of an earlier three-country Free Trade Association among Barbados, Antigua and Guyana operating since 1965 provided a pilot scheme around which the regionwide CARIFTA was designed. The planning process incorporated inputs from both the business and academic communities regionally. Operating from headquarters in Guyana, the CARIFTA scheme encountered many of the disequilibria and polarization envisaged in such an elementary Type 1 scheme. A regional Caribbean Development Bank (CDB), planned as part of the overall integration framework, did not begin functioning until 1970.

Internal acrimony, particularly between the smaller and the larger territories, developed over proposals for the introduction of a common external tariff and the harmonization of fiscal incentives. These two measures, viewed as essential in correcting the skewed investment flows favouring the MDCs, were, not surprisingly, defended most strongly by the less developed territories. Eventually, the approaching deadlock was resolved in 1973 by concessions on the part of a new Prime Minister in the largest member country, Jamaica, which became a central actor in the upgrading of the arrangement to the level of a Type 2 scheme in the form of an Economic Community. This was achieved only after further intensive negotiations and the establishment of a distributive mechanism, the Caribbean Investment Corporation, to ensure greater investment flows to the smaller territories of the Eastern Caribbean. The new Caribbean Community and Common Market

(CARICOM) came into being in 1973, under the Treaty of Chaguaramas.

The integration movement has remained within this Type 2 framework of economic co-operation objectives, over the past decade and a half. According to functional integrationist theory the process can best be advanced through "gradual politicization of the actors' purposes which were originally considered 'technical or 'non-controversial'. Politicization implies that the actors, in response to the initial purposes, agree to widen the spectrum of means considered appropriate to attain them." Haas and Schmitter, in detailing these factors further, argue that three sets of factors perform a decisive role in the transition from economic to political union. The first of these are background variables such as the unit size, rate of interaction and level of elite compatibility. The second set of factors are the variables at the moment of economic union, such as the commonality of government objectives, and the degree of authority vested in the union. The third set are process variables relating to decision-making styles and the adaptability of the members to crises [Haas and Schmitter 1966: 261-274].

Synopsis

Judged by these standards of the functional integrationist school, Caribbean economic integration is still considerably far removed from consolidation into a political union. Unlike the European frame of reference of these theorists, the motivating factors appear less to be the gradual politicization of technical or bureaucratic issues, than the economic crises and external political developments having a common effect on regional economies. The fuel crises of 1976 and 1990, for example concentrated the attention of the movement on intra-regional strategies and resources, and the threat to agricultural commodity export markets posed by the Single European Act also gave rise to concerted regional political evaluations of further integrative survival strategies.

To date, however, the 1973 Treaty of Chaguaramas, establishing the institutional framework and operational methods of CARICOM remains substantially unchanged. Whereas one of the functional integrationist expectations would be for a delegation of more authority to the centre, the reality within CARICOM has been a diminution of the power of bureaucrats in the CARICOM headquarters in Guyana. The main motive force in the movement appears to come intermittently from the political leaderships and from organised interests such as academic and business groups in member countries, in response to developments in the global economic environment.

2.7 - UNITED STATES INFLUENCE ON REGIONALISM

As we noted earlier, the activity and influence of CARICOM has varied with the degree of commitment on the part of national governments particularly in the MDCs. From a peak level of activity in the 1970s, regional trade experienced a major decline during the 1980s [Samuel 1989: 223]. In this period, the policy of the largest member state, Jamaica, was largely focussed on bi-lateral trading and political relations with the influential United States government. The US government itself was engaged in the promotion of a new trade and aid scheme, the Caribbean Basin Initiative (CBI), the effect of which was to undermine the regional integration movement. We discuss elements of the CBI here, as an example of the effect of US policy on the region.

The CBI, introduced in 1984, provided duty-free treatment to a number of export products from designated Caribbean countries which comply with certain specified political criteria. These included provisions that the beneficiary country (1) was not a communist country, (2) has not nationalised or seized property owned by U.S citizens without proper compensation, (3) that the country does not provide preferential treatment to products of developed countries that are likely to have a significant adverse effect on U.S. commerce, (4) that the country agrees to provide equitable and reasonable access to its markets and basic commodity resources to the United States and (5) that certain limits be observed in the degree to which a beneficiary country uses export subsidies or imposes export performance requirements or local content requirements that could distort international trade [Pantojas-Garcia 1985: 107-8].

Under these rules, both Grenada and Guyana, as well as Cuba in the Spanish-speaking group, were identified as countries to be excluded from the pact on political grounds. However, in the case of Grenada, the threat was made unnecessary because of the military invasion carried out by the US in October 1983, three months before the CBI legislation was due to come into force. The benefits of the CBI legislation were then extended to the regime imposed after the invasion.

But the effect of this US legislation on regional integration was to divide CARICOM member countries along US determined political lines and then set countries in competition against each other for access and quotas to the United States markets.The development and consolidation of fragile CARICOM trade arrangements were disrupted by a resurgence of interest in export processing zones (EPZs), US twin-plant assembly industries and the maintenance of good relations with the United States. "Thus, it seems clear that the political and economic conditions established by the CBI are mainly intended to stimulate U.S. investments in the region and only marginally to result in the expansion of locally owned productive activities." [Pantojas-Garcia 1985: 109] It certainly also performed a undermining role in the process of Caribbean integration in the 1980s.

Dissatisfaction with the real performance of the CBI in its first five years of operation, a change of government in Jamaica in 1989, as well as developments within the European integration movement, are among factors giving rise to renewed interest and activity on regional integration. Existing economic difficulties, however casts some doubt on whether this increased regional co-operation activity will involve any qualitative changes in the direction of Mytelka's Type 3 integration scheme. Substantive changes to the existing system would involve strengthening and politicizing the Draft Agreement on Foreign Investment as an example of a policy measure aimed at consolidating common deficiencies and reducing the dominance of overseas transnationals in the region.

Such a move would involve significant implications for the method of operation of firms such as Cable and Wireless in the region. However, market performance indicators and loan conditionalities being stringently enforced by both the World Bank and the International Monetary Fund (IMF) in the region, as well as the burden of debt repayment, have meant more liberalization rather than greater regional regulation in the telecommunications and other sectors. In these circumstances, any tightening of regulatory regimes appear less likely in the short term. Instead, further reductions in regulatory arrangements are likely, as suggested by Frobel [1988: 64]

2.8 - CONCLUSIONS

Despite the current influence of the United States in the region, the countries of the Caribbean Community (CARICOM) continue to maintain important political and economic relationships with the United Kingdom, derived from their common history as former members of the British empire. The region played an important, if involuntary, role in the establishment and expansion of that empire through the economic returns derived from slavery and the plantation economy.

Among the innovations of the Industrial Revolution, to which the profits of slavery contributed, were the technologies of electro-magnetic telegraphy and related cable production. For the exploitation of these innovations, the strategic location of the Caribbean offered an already established bridgehead to the vast markets of South America and a monitoring post on developments in the burgeoning rival to European dominance, the United States. It is in this respect that the Caribbean colonies held the prospect of providing a strategic advantage to a widening of the Nineteenth century empire-building of Britain.

Many territories of the region, such as Montserrat, parts of the Virgin islands and Bermuda remain British colonies today, some 30 years after the process of de-colonization began within the region.But even among the newly independent countries, major institutions and historical influences remain which continue to condition both modern policies and structures in the region. One such remaining centre of British economic influence is the multinational firm Cable and Wireless. Its dominant presence in the telecommunications sector of the modern Caribbean, poses a challenge to the realization of effective regional control over an important area of development policy-making.

In the face of contracting commodity markets and mounting indebtedness, the region has sought to establish various integrative institutions. Their effectiveness however, is often undermined by the economic, political and military dominance of the United States in the region and the policies pursued by individual CARICOM member countries. The response of the region is therefore constrained by a period of stagnation in the pursuit of regional integration. The absence of these wider efforts at collective action has contributed to the situation of poor policy co-ordination in telecommunications and foreign investment regulation in the region.

CHAPTER 3

TELEGRAPHY AND EMPIRE-BUILDING: ESTABLISHING THE EARLY CARIBBEAN NETWORKS

The technological antecedent of Twentieth century optical fibre, microwave and satellite technologies, enabling rapid global communication across once unthinkable distances, was the innovation of telegraphic cable communication. Much in the same way that a convergence of computer systems, digital technology and satellites have today set the stage for a revolutionary transformation of industry, trade, communication and productivity, so too did the harnessing of the steam engine, electricity and telegraphy transform global development and communication in the Nineteenth century.

In many areas of the world, the contemporary paths of communication flow, even with the employment of dramatic new methods, remain those laid down in the formative years of cable communications. Within the Caribbean, for example, the present-day configuration and ownership of the communication system owes much to the groundwork and character of the structure established over a century ago. In this chapter, we trace the penetration of the telegraph and later the wireless system into the Caribbean colonies, highlighting the political and commercial objectives which motivated the promoters. We will argue later that these have remained a primary consideration for network expansion and development in the modern Caribbean.

In attempting to come to grips with the significance for the modern Caribbean of those early technical innovations, it is useful to reflect initially on the historical development of long distance human communication leading to the electro-magnetic system of telegraphy.

3.1 - EARLY METHODS OF REMOTE COMMUNICATION

Many simple, and often unreliable non-verbal systems of message transmission preceded the more advanced telegraph, and were used mainly in earlier naval and defence applications. In Africa and parts of the Caribbean, the blowing of horns or shells served to warn of the impending approach of an enemy. Beckles notes that an early mechanical form of long-distance message signalling was in operation in the Caribbean in the early nineteenth century: "In Trinidad, a pattern of balls and flags on the arms of a tower was used to relay phrases such as type of ships, or their cargoes, or the weather." [Beckles 1989: 72]

In Europe, the French developed a system in the late Eighteenth century, to improve the transmission of military information for the continuation of the Napoleonic Wars [Brock 1981: 56]. Developed by the Frenchman Abee Claude Chappe, the system was called the semaphore telegraph. It was presented to the French Legislative Assembly in 1784 and put into operation ten years later in 1794. By 1835 an extensive semaphore telegraph network was the most advanced signalling system in existence in Europe.

> "The Chappe semaphore telegraph required the erection of posts at such intervals and on such heights or on open ground as to make each post visible by telescope to the next in either direction. Those intervals averaged about fifteen kilometres (9.3 miles). Each post bore a crossbar with a pivoted arm at each end. Ropes and pulleys permitted the adjustment of the two arms to signify letters or words in the code system used." [Desmond 1978:104].

Though a significant improvement on the previously used systems of flags and sounds, Chappe's mechanised samaphore telegraph was still a cumbersome, slow and militarily vulnerable system of communication. The system could not be relied on in a thick fog, for example.

New techniques by which messages could be transmitted in encoded form, along wires stretched over great distances, began to be tested both in Europe and in the United States in the early 1830s. These early methods, described as the Electric Telegraph, represented the first advanced telecommunications systems, in a world where detailed messages were transmitted at best by bearer travelling on horse-back or later by using the railway system for inland contacts, and steamers and other ships for overseas despatches.

"Before the 1840s, it took 5 to 8 months for a letter to travel between Britain and India, and the writer could not expect to receive an answer in less than 2 years. Even after steamships it still took six weeks in each direction." [Headrick 1988: 96]

News reports, government information and colonial directives as well as personal messages were, thus, subject to major and disruptive time-lapses and transportation costs, at a time of expanding colonial empires and wars of conquest within and outside of Europe. It is in this context that further research into improved communications methods took place.

3.2 - THE ELECTRIC TELEGRAPH

Leading this research in Britain was the Electric Telegraph Company operated by Charles Wheatstone and and William Cooke. Their system initially involved transmitting electrical signals along the steel lines of the railway track. This 'chronometric telegraph' was tested along a mile and a quarter of the London to Birmingham railway track, with the impulses conforming to a code designed by the inventors and later known as the European or Continental Code.

By 1837 the British government granted the company a patent, allowing it to implement and protect its new technology of message transmission by land lines from one part of the country to another. This patent marked the point of the first formal interface between the private innovators and the state in the field of telecommunications in an industrially emergent Britain.

At the same time, in the United States, another leading inventor, the artist Samuel Morse, was conducting similar experimentation, using a different technique. Morse's telegraphic device sent a signal over a wire as an electric circuit was alternately closed and opened by the manual operation of a brass 'key'. A varied sequence of metallic clicks cause an alteration of the current flow and, assisted by a magnetic field, could be interpreted by way of a code designed by Morse. The audible signals were later elaborated into a series of dots and dashes mechanically conveyed onto tape or ribbon by the incoming impulses. The inventors system of translating each series of dots and dashes into symbols for each letter of the alphabet, numeral or punctuation mark, became widely used and known as the 'Morse Code' [Wood 1939: 228]

By 1836 Morse had designed and made his apparatus, demonstrating it at New York University by 1837. Within months he applied for a patent to protect his invention, which was granted only in 1844. Morse was credited with being the inventor of the recording electric telegraph, which from the outset was regarded and used in the United States as an instrument for the rapid transmission of news. The parallel magnetic system was under development in Europe simultaneously.

A universal weakness of these new transmission technologies however, was that, despite their proven advantages on land, they were not capable of transmitting messages overseas. Private messages and government dispatches still had to be conveyed by Packet Steamers across the English Channel to nearby France. In the case of the far-flung colonial empire, information about new laws, despatches from the colonial office and the return still had to travel by ship, often taking several months to be delivered.

This represented a severe limitation on the effectiveness of colonial political and military control, as well as on broader international trade and communication. The British authorities as well as private trading interests therefore looked with increasing optimism towards the day when the so-called 'electric telegraph' could be extended overseas. Such political interest in the future prospect of the telegraph was frankly expressed on behalf of the British Foreign Secretary in a letter to the Continental Telegraph Conference, held in Paris in July 1851.

> "Lord Palmerston directs me to observe that the free use of continental electric telegraphs would be of great political advantage to Great Britain by enabling the Government to communicate with great rapidity on every desirable occasion with British diplomatic and consular agents abroad and especially in thus affording the power

of early explanation with foreign governments, on occasions when misunderstandings may have arisen .. .. We should also frequently derive great benefit from the rapid conveyance of intelligence of a political and military nature from China and from our Indian and other possessions..."
[Palmerston July 4, 1851 in PRO File FO 97/197]

The main technical problem faced by scientists in this field was how to insulate the electrical cable from water, to enable lines to be laid at sea. Wheatstone told a Committee of the House of Commons in 1840 of his attempt to use tarred hemp as the insulating cover, but this was not to prove successful. It was not until five years later that a successful extruding machine was built capable of insulating wire. The machine was invented and patented by Charles Bewley of the Gutta Percha Company in 1845. The technology was also made available by Bewley to the firm S.W. Silver & Co., but was commercially exploited by the Gutta Percha Company, which was renamed TELCON. A convergence however, of techniques of insulation with the technologies of the telegraph and of electricity marked the beginning of the era of 'submarine telegraphy' to which Palmerston had looked with such imperial optimism [Trowbridge 1938: 173-177, Pender 1929:22, Barty-King 1979: 11-15.]

3.3 - TELEGRAPHIC FIRST BASE: EUROPE

In June 1845, John and Jacob Brett registered a firm, The

General Oceanic Telegraphic Company with the objective of laying a submarine cable across the Atlantic Ocean linking Europe and the Americas. Before this ambitious undertaking was attempted, however, John Brett accepted the lesser task of laying a cable link between Dover in England and Calais in France. To do this, he formed the English Channel Submarine Telegraph Company, which successfully laid the cable link in 1850 [Pender 1931: 75].

This pioneering connection broke down after only six days. However the problem was diagnosed as being related to the external materials and not the electrical technology, and the global importance of this breakthrough in establishing direct telegraphic links across the sea was widely recognised. A year after it was accomplished, representatives of four European governments possessing land-line technology including Britain, France, Prussia and Belgium, attended an International Electric Telegraph conference in Paris.

At this meeting, the other European participants expressed unease that Britain was the only country among them whose telegraph system was not operated by the State. Foreign Secretary, Lord Palmerston was known to be resolved to obtain an Act of Parliament to bring these activities within the direct purview of government. The justification for this public sector operation of internal telecommunications lines was the necessity to conform with existing European standards and state ownership, which would facilitate European interconnectivity. In addition, he argued in favour of state ownership of the internal system on grounds of national security, government administration and improved public access to information:

> "... the government and country would draw much indirect advantage from any agreement which would secure indefinitely to the British newspapers the unrestricted use of the telegraphs...How the system of telegraphic communication, established and maintained in this country by private enterprise is to be brought into harmony with the national system of telegraphs under government control which prevails universally on the continent, so as to induce other governments to admit Great Britain to a free participation in the use of their respective electric telegraphs, it will be for the Lords of the Committee of Privy Council for Trade to determine....it would be desirable to remove every obstacle which may stand in the way of full use of the electric telegraph" [Palmerston in PRO File FO 97/ 197].

A Telegraph Purchase Bill was presented to the British Parliament in 1868, under which the Post Master General would acquire and operate existing and future systems of inland telegraphy. On the basis of this, a grant of 8-million pounds was to be allocated to buy out the assets of such companies in the

United Kingdom and the investments within these companies of private railway firms. The government, therefore, took over the internal telegraph system, placing it under the Post Office.

Significantly, however, the enterprises engaged in the external telegraph connections with the empire were not nationalised. Brett's submarine cable system, for example, remained within the purview of private investment well after it had succeeded in establishing a lasting and reliable link between Dover and Calais. Despite high capital cost of this undertaking, its financing was left to private capital. But like the Channel Tunnel of the 1990s, government maintained a close political interest in the success and significance of this pioneering project.

With the cable link to France accomplished, private businessmen and the British government alike began to examine other feasible submarine application of this new technology. Soon the next target became cable links with Ireland across the 60-mile span of Irish Sea. After two unsuccessful attempts, a link from Port Patrick in Scotland to Donaghadee in Ireland was established in 1853. These were followed by other successful links to Holland, Belgium and other European centres of commercial and political interest to Britain.[See Baglehole 1969: 9].

Synopsis

The successful development of technology which enabled inland message transmission by cable, marked a very important stage in the development of greater centralised control by the urban-based state apparatus over rural areas. As Shields and Samarajiva, quoting the Maitland Commission, point out, reliable point to point communications technology between urban and rural areas is often seen as enhancing "the ability of government to co-ordinate administrative activities, improve internal security and facilitate the incorporation of rural economic activities into the national economy by enhancing trade flows" [Shields and Samarajiva 1990: 204]. It is consistent with utilization of these advantages that the British government, citing the situation in mainland Europe, moved swiftly to nationalize the internal network by 1868.

But, as Sheilds and Samarajiva also point out, the extension of telegraphic and other lines of communication into remote areas also meant the possibility of increased industrial, commercial and cultural penetration of the internal periphery: "The fact that integration detracts from the rights of rural communities to define their development priorities is ignored." The example of the effect of new telegraph and telephone systems on the internal political and socio-economic life of early 20th century Ethiopia, illustrated some potential consequences. According to Garretson, these systems "helped centralize power in Addis Ababa since the emperor would communicate with distant provinces in hours rather than weeks or months...it also strengthened some of the authority of the great nobles, largely at the expense of peasants and serfs who suffered new taxes to pay for the system's maintenance and upkeep. On the other hand, traders benefitted greatly, since quick money transfers could be made or the latest market value of a commodity ascertained."[Garretson 1980: 59, quoted in Shields and Samarijiva 1990: 204].

In England, the Chamber of Commerce and the large newspaper establishments were among the leading supporters of nationalization, because of the rapid expansion of the network at lower tariff levels which state ownership was expected to confer, over private monopoly. The commercial and publishing interests anticipated an unprecedented opportunity for market expansion and rural access. Foreman-Peck notes that whereas under the private telegraph companies, the number of telegraph offices stood at 2,155 in 1868, the number of Post Office telegraph stations totalled 3,444 by 1872. "The volume of telegraph traffic leaped upwards, in the year ending March 1871, 9.8 million messages were sent, compared with 6.4 million in the calender year 1868." [Foreman-Peck 1989: 85].

Early inland telegraphy, therefore, was likely to have played an important role, together with the postal and rail systems, to the economic and social incorporation of what Galtung calls the 'internal periphery' of the imperial Centre [Galtung 1971:306]. The British state, through the monopoly of the Post Office, took direct control of this process, initially by supporting the reseach, but later by nationalization. Mastery of the technology of submarine telegraphy would unleash a similar process at a wider, global environment.

3.4 - SUBMARINE CABLE TELEGRAPHY AND COLONIAL CONTROL

In the intervening years after the development of the land-based telegraph system in Europe, the British colonial authorities began investigating ways in which it could be used to upgrade imperial communications and control by colonial administrators, especially within the larger territories and dominions, and in scattered island-possessions such as the West Indies.

> "Communications are of the essence of our empire and unless we succeed in solving some of the most urgent problems of more rapid communications, it will be almost impossible in the future to hold together this vast empire, scattered over the whole globe." [British General Smuts in Wilshaw 1936:107]

Not surprisingly, the challenge of improved colonial control over India, placed that vast sub-continent among the first within the British Empire to receive land lines. This was introduced in 1851 and later "at the instigation of the Governor General, Lord Dalhousie", extended to Calcutta and Agra and then to Lahore and Peshawar [Barty-King 1979:7]. While declining to take over the commercially lucrative trans-oceanic telegraph lines, British political interest in their continued expansion throughout the empire was reflected in the allocation of state grants and other incentives, initially to the smaller companies such as the Bretts' General Oceanic Telegraph Company.

Later, the conglomerate Eastern and Associated Telegraph Group, was also to benefit significantly from a close co-operative relationship with the British government. Headrick notes that "Until 1878, Eastern received no subsidies or dividend guarantees, but they did get considerable official help in the form of landing rights, ocean-bed surveys, diplomatic support and government cable traffic" [Headrick 1988 :106]. Later, the company was to receive other more direct state support in exchange for its active implementation of an expansion in the imperial telegraph network. It is this relationship, continued and intensified later, which we describe as the beginnings of a corporatist symbiosis between the state and the early telegraph industry.

The Eastern Group was controlled by the Manchester-based textiles and cable entrepreneur John Pender, who had major interest in the fibre and other raw materials from India. The role of Pender, considered a founding father of Cable and Wireless, will be discussed in greater detail later. However, it appears that economic interest in Asian textiles played a major role in the early extension of the telegraph there, as other raw materials did in the later penetration of the Caribbean and the Americas. But in addition to the economic benefits to its private industrialists, the additional motive of the state in providing strong support was the increased control which the network offered in the administration of empire.

> "The political situation in continental Europe and similarity of resource endowment historically directed British economic interests into long distance trade and specialization, importing food and raw materials and exporting manufactures and semi-manufactures. So in the 1850s, Britain's most important trading partner was the (independent) US and second in importance was the (colonial) Indian Empire. Naturally, communication with these two areas was a priority, hence the state support, both for reasons of imperial security and economic interest and the development of TELCON." [Foreman-Peck, Correspondence 1990 :2]

In central Europe, meanwhile, neighbouring mainland territories with the landline facilities began to confront the issues of transborder communication flow and exchange of tariffs for mutual message transmission. At first, the issue was approached through bilateral treaties. But as more and more countries became affected, a multi-lateral approach was also developed. In July 1850, an Austro-German Telegraph Union, the first of its kind was formed, holding regular conferences between 1850 and 1863. Its membership was extended to five other central and northern European states.

In western Europe a similar organization of national telegraph operators was formed on the initiative of France and Belgium in 1851. An expanded membership created the West European Telegraph Union in 1855. By 1858, consultations between these two Unions resulted in a first joint conference in Brussels, Belgium, to be followed by a major international conference in Paris in May, 1865. This conference created an International Telegraphic Union (ITU), which by the following year had issued regulations affecting telegraphic traffic throughout Europe. It is this Telegraphic Union which, after World War Two, was to become the International Telecommunications Union (ITU), affiliated to the United Nations and based in Geneva.

With the advent in Europe of the submarine cable, the British colonial administrators of territories such as India, no less than the Colonial Office itself in London, were anxious to take advantage of the trans-oceanic cable technology. An attempt was made to link the southern coast of Europe with North Africa in 1854, but this was abandoned after some difficulties.

The attention of the private developers of this new technology was now to be focussed on the original major task of linking Europe with the Americas across the Atlantic Ocean. Initiatives by the Atlantic Telegraph Company in England was matched by those of a wealthy paper merchant in the United States called Cyrus Field. He formed The New York, Newfoundland and London Telegraph Company independently to carry out the transatlantic link. Field had difficulty in raising the required money for the project in the United States and later travelled to London, where he made contact with John Brett.[Pender 1931:79]. The two men began a collaborative venture with the financial support of their respective governments.

> "...both British and American governments agreed to pay the Atlantic a subsidy of 14,000 pounds a year up to the time when its dividend had reached 6 per cent, and 10,000 pounds a year subsequently. This was not just by way of encouragement, it was payment to a private enterprise for a service which otherwise government would have to have provided for sending government despatches." [Barty-King 1979: 12].

In 1857, the first attempt was made by this company to lay a telegraphic cable under the Atlantic, but this was unsuccessful. A second attempt on July 17, 1858 succeeded. The first transatlantic cable signals were received on August 13, and within days a ninety eight word message was conveyed from Queen Victoria to President Buchanan, with a transmission time of 16 hours! The press began to make early use of this facility, with this first transatlantic message being printed by the New York Sun newspaper.

Within less than a week in operation, however, communications subsided. Like the trail-blazing link to France, the problem was traced to a fault in the cable insulation.

Despite attempts to boost the system, it went completely silent on September 18, 1858.

Similar attempts, with British government financial support failed to establish submarine links between Egypt and India. The overall situation led the British government to set up a special Committee of Enquiry in 1859 into the Construction of Submarine Telegraph Cables. Technical evidence was gathered bearing on the problems of induction and retardation of current, the limitation of the use of Morse Code, and the new alternative technology of William Thompson's Mirror Galvanometer instrument. This enabled messages to be sent along a single line simultaneously, without having to wait for the clearing of the line before another message was sent. The Committee concluded that much remained to be understood in technical terms about cable transmission, and it urged more research into both transmission and insulation [HMSO 1851].

In all this, and despite major losses in both the capital of its shareholders and governments subventions to the project, the Atlantic Telegraph Company remained interested in successfully laying the cable across the Atlantic. To this end it continued to lobby the British government for permission to again raise funds for the undertaking, in line with the new state regulation of the joint stock company. It also sought financial guarantees from both the British and U.S. governments for the project. Despite government reluctance, the overall importance of direct submarine communications between Europe and the Americas was a good lobbying point and by 1859, each government agreed to pay 8% subsidy a year on the allowed capital of 600,000, but payable only on the condition that a cable was successfully laid and working.

Extraordinary co-ordination was now required both in financial and technical terms, if this project was to be successful. Through the efforts of British businessman John Pender, director of the Atlantic Telegraph Company, a merger was arranged between the two leading cable manufacturing companies. The Gutta Percha Company and the Glass Elliot Company of Greenwich came together to form the Telegraph Construction and Maintenance Company(TELCON) Limited in 1864. This new company was to provide credit to the Atlantic Telegraph Company of over half the costs involved in manufacturing and laying the cables for this fresh Atlantic venture.

After thus overcoming the problem of raising the 837,140 pounds required to finance the 2,500 miles of improved cable, the Atlantic Telegraph Company finally began the renewed task of laying the cables in May 1864. To their dismay, however, the work ran into problems within weeks of starting and eventually the cable broke and fell into the sea, causing the project once again to be abandoned.

With a government refusal of permission for any further capital-raising activities by the unfortunate Atlantic Telegraph Company, the task of making yet another cable venture across the Atlantic fell to a newly formed company, The Anglo-American Telegraph Company. This new company was financed mainly by the directors of TELCON, a company whose long term future as a major cable manufacturer was tied up with the success of long distance submarine cable systems.

For the new venture, TELCON manufactured lighter weight but stronger cable. This was successfully laid across the Atlantic Ocean in July 1866, from Valentia to Newfoundland, by the Anglo-American Company. The company, however, in an attempt to recover some of the costs incurred in the transatlantic venture, set a rate of$20 a message. Following complaints by one of the line's earliest and most frequest users - the press agencies, especially in the United States, this rate had to be reduced.

Synopsis

The development and operation of submarine telegraphy in Britain was pioneered by private telegraph companies, but with the strong financial and technical support of the British government. In addition to seeing the economic advantages to industry, the state's involvement was also motivated by the prospects of greatly improved political and military control over a globally dispersed empire. A convergence of objectives led to a corporatist relationship between the private telegraph interests and the British state.

From the point of view of this economic and political interest of the British imperial state, global telecommunications achieved a major watershed in 1866 with the accomplishment of the elusive dream of direct cable communication between North America and Europe. It was an achievement which also held great significance for the islands and territories of the Caribbean, including those under British colonial rule.

Retrospectively, Desmond commented approvingly on the universal impact of the innovations: "The establishment and extension of telegraphic service opened the door for most peoples of the world to gain a vastly greater, and prompt understanding of their environment." [Desmond 1978:110]. In practice, however, the nineteenth century telegraph was a facility utilised mainly by the political, military and business elites. For reasons of cost and access to the network, this early telegraph was far from being widely available. Political and commercial considerations were paramount in the extension of the telegraph to the colonies, including to those in the Caribbean, and these interests predomidated in their use. [See Headrick 1988:97].

As with the extension of the early British telegraph network into the internal national periphery, the penetration of the system into the global colonial periphery, paved the way for both greater political control and more intensive capitalist investment and exploitation. "Communication channels, being carriers not only of information but also of power, are a crucial factor in the establishment, maintenance, and change of these power relations. Inasmuch as the Roman roads and England's control of sea lanes were basic to the maintenance of empires in early times, telecommunications is basic to the exercise of transnational and state power today. The corollary is that telecommunication is necessary to balance that power, for realization of the rights of self-determination of countries, groups and communities."[Shields and Samarajiva 1990: 207].

3.5 - ARRIVAL OF CABLE TELEGRAPHY IN THE CARIBBEAN

The first proposal for introducing telegraphic cable communication in the Caribbean was made in 1857, in the wake of news that a transatlantic cable was to be established with British government subsidy. According to the official Cable and Wireless Historian, Hugh Barty-King, a meeting was called in the townhall in Bridgetown, Barbados, in February, 1857, attended by the Governor, members of the legislature and leading merchants. The meeting was addressed by one Captain Rassloff, a Danish engineer working for the British Canadian government.

He outlined a plan whereby telegraph cables would be laid, linking British and Danish West Indian islands, as well as joining North and South America. In describing this proposal, Barty-King notes that "The main cable would start from Florida, pass through the Bahamas and terminate at St Thomas in the Virgin Islands; a second cable would run through the British West Indies, ending at St Lucia, where it would branch into two routes, one through St Vincent, Grenada, Trinidad and the Spanish Main, and the other to Barbados, Tobago and Georgetown, British

Guiana." [Barty-King 1979:13-14].

This plan, though enthusiastically greeted by the local elite and colonial administrators, was never implemented. Failures in government-subsidised submarine cables elsewhere in the Empire (for example in the Red Sea and India), served to discourage the British government from providing backing for any further projects. The reciprocal relationship between the private investors and their state benefactor had temporarily broken down as the private sector partners were proving incapable of delivering the projects to which they were entrusted.

Such ideas of linking North America, South America and the Caribbean islands by cable were not to be actively considered again until 1865, and on this occassion, not by the British but by the Americans. In December 1865, a bill was introduced in the U.S. Congress granting a firm called The International Ocean Telegraph Company, sole rights to operate a telegraph system between Florida and the West Indies for 14 years.

The contract for the manufacture of the cable was awarded to the British company TELCON, and the cable was laid between Punta Rassa in Florida and Havana in Cuba via the island of Key West, in December 1866. The limit of this system was circumscribed by the American sphere of influence, which up to this point covered the former Spanish colonies but had not yet spanned the British colonies in the region. The business and colonial elites in these English-speaking territories, however, learnt of the dramatic impact of direct communication to Europe via Florida, on the American controlled islands.

It was not long then, before the American James Scrymser, proprietor of the International Ocean Telegraph Company, made his approach to offer the telegraph cable linkage to the British colonies. He also actively lobbied the Colonial Office, and by September 1867, in a despatch from London, Colonial Secretary, Lord Camanor, advised colonial governors in the West Indies:

> "You will therefore be at liberty, on application made by the International Ocean Telegraph Company, to propose to your legislature a law enabling them to land and work cables, but I have to request that you will guide yourself by the treasury's letter of the 7th of June as to the general principles to be observed in such a law, particularly those of not granting exclusive privileges, and of securing priority for government messages." [Barty-King 1979:28]

Further recommendations included provisions for compensation for private property and authority to the government to take over the facilities in time of war or during any 'insurrection'.

The areas of primary interest by International Ocean Telegraph Company were the larger islands of Jamaica, Barbados and Trinidad and the colony of British Guyana, but soon islands such as St Kitts, Antigua, Dominica, St Lucia, St Vincent and

Grenada became involved. All the territories contributed subsidies, which amounted to £17,000 a year. The Barbados regime placed as a condition of its subsidy, the early start of the installation work, towards completion by August 10. 1872.

3.5.1 - The West India and Panama Telegraph Company

Although it was originally expected that IOTC would itself effect the other regional cable connections into the existing network from Florida, negotiations with British interests led to the formation of a separate company registered in London, to do the work in British colonial Caribbean. This action demonstrates the over-riding importance placed on spheres of colonial interests and control in the establishment of the early communications network in the region and throughout the world.

The company formed, the West India and Panama Telegraph Company Limited (WIPTC), was set up on August 9, 1869, with subscribers including William Andrews of Siemens Indo European Telegraph Company, Henry Weaver of the Anglo American Company, and ship-owner Henry Holmes. It's Board of Directors, which included Cyrus Field, was chaired by C.W. Earle [Companies House File 00011116].

The WIPTC was capitalised by the issue of 65,000 ordinary shares of 10 pounds each. 45,441 shares in the company were sold to the public in England, while a further 11,750 shares were taken by the contractors, the India Rubber Company, as fully paid up shares in part payment of the contract price, which totalled 587,000 pounds for making and laying the cables. Uptake of the shares were no doubt encouraged by sentiments such as appeared in the London Times of August 26, 1869: "There can be no doubt that the most popular outlet now for commercial enterprise is to be found in the construction of submarine lines of telegraph." [In Barty-King 1979:29]. Indeed, in the August 1869 prospectus of the West India and Panama Company, prospective investors were told that revenues over the first three years would run to £468,000 against estimated working expenses of £60,000.

The West India and Panama Telegraph Company was one of four telegraph companies founded in Britain in 1869 during a period of dramatic expansion of submarine telegraphy into the British colonial empire. The main vehicle of this expansion was private enterprise, but under the active control and guidance of the central colonial administration in London and its representatives within the colonies. The development of these other early telegraph companies is discussed in Chapter 5 as part of a analysis of the process by which a network of firms merged to create Cable and Wireless.

The WIPTC took over the plans and concessions of the IOTC. However, by then a stricter timetable of completion was being demanded by the colonial authorities, as a condition for their subsidy. The cable works were now expected by the government of Barbados to be completed by the 4th of October 1871.

The West India and Panama Company, significantly, was not only involved in laying the cables and operating the system. It was also a user of the service since the company also published and circulated a daily news bulletin carrying reports of market prices in London and New York. This service was provided to regional interests as part of the subsidy of£2,500 paid to the company by each territory.

The venture by the The West India and Panama Company was more ambitious than simply linking the islands of the Caribbean area. As the Company's name suggests, it was intended to establish as part of the same project, an expensive linkage with Panama in Central America and then along the South West Pacific coast to Argentina and Montevideo in Uruguay. The project involved the longest submarine cable ever ordered up to then, a total of 4,100 miles. To help facilitate this, the British colonial government offered to enter into discussions regarding a government subsidy. This proposal was accepted by the Company, and marked a new level of government involvement in the project.

Cable-laying for this Caribbean and Latin American network began in late 1870, after a fleet of cable ships left the Port of London in May that year. Led by the steamer the 'Dacia', the fleet consisted of a repair ship and three additional support vessels. The first cable which the expedition laid was one from Batabano on the south coast of Cuba to Cienfuegos along the same coastline and then on to Santiago in south-western Cuba. This initial task was completed by September 2, 1870, under the direction of Sir Charles Bright.[Baglehole 1969: 5-6]

The next task was to link the island of Jamaica with the Santiago end of the transatlantic cable. This was accomplished with little difficulty, with the shore end being landed near Plaintain Garden in Holland Bay on Jamaica's north east coast on September 15, 1870. In this way, Jamaica became the first British Caribbean territory to have a direct telecommunications linkage to Europe, routed through Cuba to Florida, across American landlines to the new transatlantic cable en route to London.

This 'problem' of routing a British cable through a Spanish colony was regarded seriously enough to warrant the establishment in England of the Cuba Submarine Telegraph Company, with the exclusive aim of laying another cable by-passing Cuba. Sir Charles Bright, to whom the task of laying this by-pass cable was also assigned, began the undertaking but it was later abandoned when the cable broke and fell into the sea. Instead, he turned his attention to establishing the inter-island submarine cables for the other territories [Baglehole 1969:6].

After linking Puerto Rico to St Thomas in the U.S. Virgin Island and then to St Kitts, Bright attempted the long haul from Puerto Rico to Jamaica to connect with the mainline to Europe. Misfortune again attended this venture and after laying about 600 miles of cable, the line again broke, emphasising the unreliable, trial and error methods and variable materials which formed part of the early telecommunications industry.

TABLE 3

A CHRONOLOGY OF THE FIRST CARIBBEAN TELEGRAPH CABLES

COMPLETED		SPAN
Sept 2, 1868	-	Florida to Cuba
Sept 15,1870	-	Cuba to Jamaica
Sept 15,1870	-	Jamaica-Puerto Rico*
May 10,1871	-	St Thomas to St Kitts
June 4, 1871	-	Antigua to Guadeloupe
June 16,1871	-	Guadeloupe to Dominica
June 26,1871	-	Dominica to Martinique
July 1, 1871	-	Martinique to St Lucia
July 8, 1871	-	St Lucia to St Vincent
Aug 23, 1871	-	St Vincent to Barbados
Oct 11, 1871	-	St Vincent to Grenada
Oct 11, 1871	-	Trinidad then (Guyana)
Oct 7, 1873	-	Jamaica to Colon (Panama)
June 29,1890	-	Halifax to Bermuda
Dec 15, 1898	-	Jamaica to Turks & Bermuda
Oct 1, 1924	-	Trinidad to Barbados

Sources: Cable and Wireless Archives
Baglehole 1969:43-46.
Zodiac, Dec 1964:22

* cable lost

The task of connecting with the main line via Jamaica and Florida was not accomplished until 1873, but in the meantime the cable ship Dacia under Bright continued the laying of cables linking St Kitts to Antigua and then on down the chain of islands in the order of Guadeloupe, Dominica, Martinique, St Lucia, St Vincent, Barbados, Grenada and Trinidad. Afterwards, the line was extended to British Guiana (now Guyana) on the northern coast of South America. The overall West Indian Telegraph service was completed in October 1871 with the Georgetown - Trinidad link. However because of the failure to connect the chain of Eastern Caribbean islands with the mainline to Europe via Jamaica, these islands ramained for six months unconnected to the transatlantic system. Emergency alternative arrangements had to be made and the service was finally opened on March 7, 1872 with a connection via Panama. In Barbados, announcement of this was made in the Barbados Times on March 9,1872:

> "The Telegraph Company has given notice that the cable is laid and in working order all along the line from Havana to Demerara and through the States to Newfoundland and from there to the U.K; and the communication being completed, messages can be forwarded from this island to any part of the world." [in Barty-King 1979:31].

Just under two years earlier, on October 4, 1870, the Barbados government, which was emerging as the leading instrument of British colonial policy in this field, had passed an Act designed to "encourage and promote the establishment of communications by means of the electric telegraph between this island and the other West Indian colonies and the continents of Europe and America." This Act stipulated that the entire regional cable network should be laid and operational by October 4, 1871, or else the sponsoring company would forfeit the £2,500 a year which that government had conditionally committed itself to paying for a period of ten years.

With the failure to meet this deadline, the West India and Panama Company was deemed to have forfeited a year's grant. Besides the delay in completion, further dissatisfaction with the quality and high cost of the service was reported within three months of operation. According to the Barbados Times, telegrams often had to be repeated at a cost of up to 12 each before a reply was received again frequently in a garbled condition:

> "Complaints are becoming rife in these islands about the inconvenience which has been occasioned to the mercantile community and others by the growing carelessness or incompetence on the part of the Telegraph employees. Owing to the exhorbitant rate of the tariff, messages must be necessarily condensed as much as possible to avoid incurring a heavy expense." [Barbados Times, July 6, 1872, quoted in Barty-King 1979: 32].

The reference to the 'mercantile community' and its inclination to ascribe the inefficiencies to the 'employees' rather than to the company or its techniques, offers support for the view that in the Caribbean as elsewhere, the main users of the telegraph cable were commercial and governmental interests. It would appear unlikely that either the general ex-slave population or ordinary British settlers would have been able to afford £12 a message at 1872 prices for telegraph communication.

The quality of the service improved by 1875, possibly in response to the pressure of the seemingly well-organised users group in Barbados. On this basis, the threat of further forfeiture of the annual subsidy was lifted and regular payment to the company resumed.

An internal cable service appears to have been established in Trinidad well before any other territory. This is likely to have been the result of a continuation of the inter-island cable running north from the chain of islands, then onto landlines across Trinidad for fifty miles from Maqueripe Bay in the north to Venezuela. The Trinidad leg was not completed until October 1871. But according to local historian, Edward Beckles, the first telegraph message was one transmitted between the Police Headquarters in Port of Spain and the St Joseph Police Station at 9 p.m. on March 4, 1870.

The more basic landline technology, which was already in operation in England for over two decades, could have preceded the submarine inter-island links to Trinidad. As in Europe, the early landlines followed the route of the railway. Indeed, in

Trinidad, according to Beckles [1989:72], it was the Railway Company which operated the only public telegraph system in the country, providing telegram delivery to within half a mile of the station to which it was transmitted.

The new communications system would have been valuable for the railway's own signalling and maintenance operations, but local cable delivery added an additional element to the railways services: "Telegrams were accepted at any railway telegraph station or steamer depot and delivered free of charge to addresses within half a mile of the station or depot to which they were transmitted. The remarkable stability of the rates should be noted for between 1899 and 1934, despite the inflation in the rest of the economy, the rates remained at sixpence for 12 words or any part of 12 words. By 1966, this had increased to the equivalent of 2 shillings [Beckles 1989: 72].

In contrast to the international or inter-island telegraph system in Barbados, what appears to be an earlier established local telegraph system served both a wider user base, as would be expected, as well as providing a low tariff and satisfactory service. The basic technology of land-based telegraphy appears to have been well established in Trinidad and elsewhere in the region before the close of the nineteenth century. Beckles notes, however that control of the technology and operation of the early systems were confined to British expatriates: " The use of foreign workers to operate relatively sophisticated tasks would seem to have an early genesis, for all records suggest that the operators and post supervisors were recruited from England." [1989:72].

Synopsis

Britain was now particularly interested in penetrating new markets in the former Spanish colonies of South and Central America. The historically dominant European power in Latin America, Spain, was beginning to lose its grip on the region. Many of the larger and more lucrative Spanish colonies had already secured political independence as Spain itself became preoccupied with internal economic and political difficulties. At the same time, internally consolidated United States of America was then emerging to project both its military and economic influence into neighbouring territories. The effect of these developments in London was a feeling that British influence in the Caribbean and Central America was being undermined. Every opportunity was therefore to be taken to extend its reach into Latin America and strengthen its hold on the Caribbean colonies. For these objectives, British dominance in the vital field of submarine telecommunications an ideal tool.

By 1872, the inaugural transatlantic telegraph system became connected into the Caribbean, linking the region to Europe and the United States, telegraphically, for the first time. But, for technical convenience, the cable from Florida in the United State intersected the Spanish colony of Cuba en route to Jamaica. The establishment of this linkage meant that the first inter-island telecommunications connection was not between two English-speaking British colonies but rather between an existing Spanish colony, Cuba, and the largest English-speaking Caribbean colony, Jamaica.

This fact was the source of dissatisfaction among leading elements in the Colonial Office in London, who felt that sensitive colonial despatches meant for the Caribbean colonies would first have to pass through Cuba, making them vulnerable to interception by European rival Spain. Others supported the alternative view that exploitation of the economic advantages of Spanish America and the Caribbean meant extension of cable routes into the Iberian region. It was a conflict between the immediate political and the long term economic objectives of British imperialism, and an indication of the imperial political objectives which privately-run telegraph companies, were involved in fulfilling. The force of the political motives prevailed over the economic aims, with the result that much effort and resources were directed towards altering this routing. The process was one of ensuring, as Galtung's model suggested, that all interactions between colonial periphery and the imperial centre were vertical, exclusive and direct.

Within the periphery itself, it was significant that while the small colonial regimes in Caribbean were collectively contributing up to £17,000 a year to the project, they were neither offered nor claimed a stake in the ownership of these vital arteries of communication. Indeed it was arranged that when the capital project of constructing the telegraphs was completed, the system would continue to be operated by the construction company as a private concern at rates determined largely by the company. This attitude on the part of the colonial administrations and the central British state towards the big cable interests stood in stark contrast to the British government's own acquisition of its internal network. The favourable treatment of the entrenched multinational cable interests operating in the colonies also contrasts dramatically with the imperial government's attitude to Marconi, the non-British, fledgeling wireless competitor, as we shall discuss in Chapter 5.

However, the conduct of the imperial Centre in relation to the Caribbean colonial periphery so far would suggest that while the British colonial authorities wanted mainly political control and power from the electric telegraph in Britain its objectives for this innovation within the colonies were both political in terms of colonial control and economic in terms of the expansion of private British multinational profit-making from the innovation.

3.5.2 - State Intervention: The Pacific Cable Board

In 1901, the British Parliament passed the Pacific Cable Act, establishing a joint venture between Britain and its larger colonies in the provision of a submarine cable route from Canada, through the Pacific Ocean to New Zealand, the Australian colonies and the U.K. The new company, called the Pacific Cable Board, marked the first major involvement of the imperial and colonial governments in the ownership and operation of submarine cables. This new state venture represented a threat to the private monopoly of the cable conglomerate operated by John Pender, and the implications of this will be explored in Chapter 5. However, the Pacific Cable scheme was of great significance to the renewal of the overall communication system in the Caribbean area.

An eastern cable route meant both an alternative network in the event of a breakdown on the transatlantic route. But it also meant the possibility that an increased number of countries could be contacted from the West Indies, even if indirectly and at great cost. In 1919, after the intervention of the First World War, the Caribbean region was directly linked into the expanded Pacific Cable network by a cable from Brazil to Barbados. The objective of this connection was to provide the British-owned Western Union Company of Brazil with a new route to Florida in the United States. But it also meant the establishment of important new sections of cable links between the West Indies and Latin America.

Between 1920 and 1922 special attention was given to the Caribbean communications infrastructure by the West Indies Cables Sub-committee of the Imperial Communications Committee. One of the guiding assumptions of these deliberations was the need for increased government-funded renewal of the communications system. This was justified on the basis that the area, so close to the burgeoning United States of America and to the vast potential of Latin America, was of strategic importance to the British regional interests.

In October, 1922, the sub-committee disclosed its recommendations that Britain, regional governments and Canada should undertake the laying of a new cable in the region, with the Pacific Cable Board as the implementing agency. This was to be supplemented by a system of wireless communication, using the techniques developed by Marconi to meet the challenges of inter-island linkages. [Marconi and the Wireless System are discussed further in Chapter 5].

The recommendations were approved and construction of the overall system began in 1923. The new cable system was designed to link London with Barbados via Halifax and Bermuda, with the Turks island as a relay station. By early 1924, the Turks Island to Barbados leg was laid as a new duplex cable paid out from the cable ship Faraday. Other lines were laid to Jamaica and Guyana, and later a spur from Barbados to Trinidad, completed in July 1924. The centre of this cable network was Barbados, where the various lines met at Prospect, and connected by underground cables to a new telegraph station at a site called The Reef.

3.5.3 - THE REGIONAL WIRELESS NETWORK

The next phase of implementation of the sub-committee's recommendations was the construction of a network of wireless stations, again centred on Barbados. A wireless relay was constructed on The Reef site, using a 200-foot tower built by the American firm RCA. Counterpart stations were constructed in other islands throughout the region (See Table 4), to establish the Caribbean's first network of beam wireless communication. The combined PCB cable and wireless system was introduced in the Caribbean in December 1924.

The intervention of the state authorities was quite timely. By the end of the first decade of the Twentieth century, the cable and telegraph equipment installed some forty years earlier by the West Indies and Panama Telegraph Company had begun to deteriorate and the company itself started to undergo severe financial difficulties. The network renewal, both in terms of new technology and alternative funding source represented by the state-owned Pacific Cable Board, was widely welcomed within the region.

The difficulties of the WIPTC was caused in part by the loss of two of its cable ships, the' Grappler', which was destroyed off Martinique when the Mount Pelee volcano erupted in 1909 , and the' Henry Holmes' which had run into disrepair by the 1920s. The company's problems were further complicated by the fact that its government subsidy was to lapse in 1924, and was not likely to be renewed, reducing revenues by 26,300 annually [Barty-King 1979:199].

In November, 1924, the Cuba Submarine Company made a bid for

TABLE 4

OPENING OF FIRST REGIONAL WIRELESS STATIONS

Barbados	-	December 1, 1924
St Lucia	-	December 1, 1924
Dominica	-	December 1, 1924
Antigua	-	December 1, 1924
St Kitts	-	January 10, 1925
Grenada	-	February 1, 1925
St Vincent	-	March 1, 1925
Montserrat	-	May 25, 1925

Sources: Barty-King 1979:198-9
WIPTC Annual Report, Dec.31, 1924

the shares of the West Indies and Panama Company, and the offer was accepted by a huge majority of the shareholders. The Directors of the Company resigned on the last day of December, 1924. Under new management and ownership, the company continued to operate, but much of its activities were made redundant by the Pacific Cable Board's new cable and wireless network.

The Pacific Cable Board itself, however, was beginning to experience its own financial difficulties, and the competition between wireless and wireline services began to take its toll in the wider economics of empire. Some colonies began to press for a consolidation of the empire telecommunications systems, a measure which was accomplished in 1928 with the creation of the Cable and Wireless monopoly.

Under the elaborate arrangements of the merger, discussed in Chapter 6, the Caribbean beam wireless stations operated by the Post Office and the regional cable network which was only recently acquired by the PCB, were acquired by the new Cable and Wireless Communications Company. The regional communications operator continued to be called the West India and Panama Telegraph Company, until 1938 when it was changed to Cable and Wireless (West Indies) Limited.

3.6 - CONCLUSIONS

Against this historical background, it can be said then, that the Caribbean's first telecommunications system for both inter-island linkage and contact with Central America, the United States and Europe began official operation in 1872. But the early system did not become a stable service until 1875. Tariffs levels were considered exorbitant, and a heavy expense even to the 'mercantile community' which, apart from government, appears to have been the main user.

Notwithstanding the shortcomings in quality and cost, the region's first telecommunications infra-structure had been laid down, two decades after the world's first sub-marine telegraph system was introduced in Europe. It had been introduced by private enterprise with a commercial motivation, but with the economic backing of the British colonial authorities for political objectives. The introduction of this telecommunications system led the way in opening up the region for the penetration by multinationals and for greater imperial control over the Caribbean.

At the same time, because of the geographical location of the region, even that early Caribbean communications system was introduced via the United States, and with the involvement of US commercial interests.This was later to become a marked feature of communications expansion in the region, moving to the competitive sphere for both markets and political influence.

Work on the region's initial cable system also brought into conflict the competing colonial interest of the European powers Spain and Britain. Cable expansion from Florida into the

Caribbean at that stage could easiest take place via Cuba, a Spanish colony until 1898. Major efforts were made for political reasons, to by-pass Cuba, an experience which was again to be repeated for other political reasons in the mid 20th Century, under the U.S. Caribbean Basin Initiative (CBI).[See Pantojas Garcia 1985: 105].

The cable telegraphy operators entrenched within the Caribbean, as in many other parts of the British empire, in the late Nineteenth century, had monopoly control over that area of the empire in which they operated. The West India and Panama Telegraph Company, later to become Cable and Wireless West Indies Limited, enjoyed this monopoly for over one century, from its founding in 1869, despite the brief interrugnum of Pacific Cable Board involvement. Like the WIPTC, however, the PCB was later incorporated into the Cable and Wireless state run monopoly. But, the establishment of the Board marked the beginning of state-run telecommunications systems outside of the imperial centre itself. Its ownership, however, was confined to Britain and the larger dominion territories, despite the PCB's integral involvement in the network renewal of the Caribbean in early 20th century, including its operation of the region's first wireless network.

Despite political de-colonization, and modifications in the ownership arrangements for some territories, the external Cable and Wireless corporation has remained the dominant, virtually monopoly operator in Caribbean telecommunications for more than a century.

PART 2

THE EMERGENCE AND TRANSITIONS OF CABLE AND WIRELESS

CHAPTER 4

MULTINATIONAL CORPORATIONS IN THE GLOBAL ECONOMY

As a context for our examination of Cable and Wireless and its Caribbean subsidiary, Cable and Wireless (West Indies) Limited, we present and discuss in this chapter some of the main issues relevant to the operation of multinational corporations and their relationship with underdeveloped host countries. In the course of this analysis, we examine multinational corporations in their own right as instruments of capital accumulation in the global economy. But we also seek to highlight the close relationship between these international companies and their home governments in controlling the resources of the underdeveloped countries, and the more recent intermediation by western multilateral lending agencies in enforcing Third World conformity to the demands of multinationals and the world capitalist system.

In the Caribbean, an annex to the Treaty of Chaguaramas establishing the regional common market and community acknowledged the need for foreign direct investment. But in the article allowing for this provision, the Community was also cognizant of the need for 'national participation' and 'common policy' in the regional approach to foreign capital:

> "(1) Member States recognize the need for continuing inflows of extraregional capital and the urgent necessity to promote development on the Less Developed Countries.
>
> (2) Member States shall keep under review the question of ownership and control of their resources with a view to increasing the extent of national participation in their economies and working towards the adoption as far as possible of a common policy on foreign investment [Article 44].

These CARICOM Treaty provisions are an acknowledgement of the importance placed by regional governments on foreign investment. But the reference to 'ownership and control of... resources', is also an acknowledgement of the felt need for self-determination and the preservation of policy control over economic and other resources.

In the four and a half decades since the Second World War, global economic activity has been characterised by the rapid internationalization of productive activities. While the process pre-dated 1945, the intervening period has seen the unprecedented rise of extensive foreign direct investment through the vehicle of large firms operating beyond their national boundaries. The stock of such companies in the United States alone increased at a rate of 10% per year between 1958-1978 [Alschuler 1988: 7], and the dramatic global spread continues, encompassing in the present period an increased emphasis on the intermediate or service sector.

The strategies and corporate aims of Cable and Wireless as a multinational firm, can only adequately be understood within the framework of the global trends and practices of large scale foreign direct investment. But in our consideration of the issue here, two additional factors need to be highlighted. Firstly, the type of foreign direct investment under consideration extends beyond traditional manufacturing or extractive industries to include the expanding service sector. This sector, which includes the provision of telecommunications services, is characterised by its direct role in the globalization process and by the rapidly changing technology on which it is based. The second factor is that the host environment with which we are most concerned consists of the small,open and vulnerable economies of the global south and the Caribbean region in particular.

4.1 - ISSUES OF MNC DEFINITION

Dunning has identified two defining features of large-scale multinational investment which sets it apart as a 'separately identifiable vehicle of international activity': "First, it embraces, usually under the control of a single institution, the international transfer of separate, but complementary factor inputs, viz equity capital, knowledge and entrepreneurship - and sometimes goods as well....The second unique quality of direct investment is that the resources which are transferred are not traded, they are simply moved from one part of the investing enterprise to another." [Dunning 1971:16]. Such firms, "with production facilities, offices or outlets in more than one country", are considered by Dunning to be multinational producing enterprises (MPEs).

Penrose [1968] describes the same corporate development in terms of the large international firm: "a firm that has substantial operating assets in a number of countries through branch offices, subsidiaries or affiliates owned wholely or in part...The firm (sometimes called a 'group') consists of the parent company and the subsidiaries or affiliates that are owned or controlled by it." [1968:40]. A problem frequently encountered is determining exactly the boundaries of large international firms. "Since many affiliates may be owned jointly with other firms, the boundaries of any one firm are not clear-cut. The most obvious measurements of the scope of a firm can be found in the consolidated financial and operating statements." [Penrose 1968:40]. While we agree that these are the most accessible sources, annual financial and operating statements sometimes obscure as much as they clarify in terms of the scope and details of a company's performance.

As Penrose notes, one of the central features of multinational corporations is their sheer size and corporate reach. However, global statistics on their overall numbers and scope differ widely in criteria variables. Possible statistical disparities relate to how inclusive or exclusive is the definition adopted for companies falling within the multinational category. This is especially the case since an important distinction is often made between the operation of multinational firms and the existence of other forms of foreign investments [U.N. Report 1974: 3-4]. While MNCs are doubtless the major actors in foreign direct investments globally, they represent a distinct segment of the FDI range.

> "A study of multinational corporations must be distinguished from the study of foreign direct investment because the most important questions to be asked in connection with multinational corporations are not limited to, and in some cases are even independent of financial flows. They concern a host of other activities also, such as the transfer of technology as well as goods, the provision of managerial services and entrepreneurship and related business practices, including co-operative arrangements, marketing restrictions and transfer pricing." [United Nations Report 1974:3]

In determining further whether firms classify as MNCs, other distinctions sometimes relate to type of company activity (extractive, manufacturing), number of foreign affiliates (eg 6 or more) minimum percentage of foreign assets owned, and other attributes. Perlmutter [1969: 10], for example, recommends a criteria of the extent to which related companies are subject to a common management or operational strategy. He also identifies three corporate types on the basis of the scope of the company's strategies: the ethnocentric firm is oriented towards its home country, the polycentric firm orients its strategies towards the host country and the geocentric company is world oriented. Perlmutter notes that aspects of each of these strategic approaches may be evident in a single conglomerate or even applied in varied form across different functions (personnel, technology, production, accounting..) in a single subsidiary.

Kindleberger [1969 :179-185], conducting one of the earliest studies on large-scale corporate investment abroad, identifies distinct categories of such firms. The 'national firm' with foreign operations maintains the methods and even legal framework of the home country. A second category is the multinational corporation, which like Perlmutter's polycentric firm, is specially sensitive to local traditions , policies and jurisdictions. A third category is the international corporation, with global outlook, influenced neither by home country nor host country policy but responding more directly to global factors affecting efficiency.

While elements of these early classifications of such companies are still relevant, and will be useful in our further analysis, a broader and more inclusive definition is required for the purposes of our study. As a result, the definition frequently favoured by multilateral institutions such as the United Nations Department of International Affairs, will be the primary definition adopted in this study. Under this approach, which is close to our earlier usage of Dunning, a multinational corporation will be regarded as "any firm which performs its main operations, either manufacture or the provision of service, in at least two countries."[UNDIA 1974:131]. A practical advantage of this approach is that much of the available statistics on MNCs is denominated according to this wider multilateral definition. But even more importantly, it avoids the arbitrary exclusion of the increasingly important category of 'services' which often gets downplayed in traditional approaches emphasising industrial classifications such as extractive, manufacturing and other 'productive' activities.

Other terms requiring definition in our discussion of MNCs are: Parent Company, used here interchangeably with Holding Company to mean a firm which exercises control over other firms. The latter will be referred to as subsidiaries in the meaning adopted by Holmes and Sugden [1989:114] as firms whose controlling company (a) holds a majority of the voting rights or, (b) has the right to appoint or remove directors holding a majority of voting rights at board meetings or (c) controls by agreement, a majority of the voting rights." An Associate Company is defined as one in which the parent firm directly or indirectly controls a minority of voting rights. And the combination of the parent company, subsidiaries and associated companies will be referred to as the Group or Conglomerate.

4.2 - TRENDS IN GLOBAL INVESTMENT

A European Economic Community Survey conducted in 1973 found that there were about 10,000 multinational firms operating in two or more countries. The number of constituent affiliates or subsidiaries was estimated to be 50,000. By 1977, according to Alschuler [1988: 7], the number of MNCs with head-offices in countries of the global centre had moved to approximately 11,000, with these companies holding shares in 82,000 foreign subsidiaries.

Consistent with global trends in industrialization, the pattern whereby a great majority of MNCs are owned by a small number of western developed countries, has not altered significantly in structural terms over the last five decades. Despite the emergence of a small number of multinational companies outside of the western industrialised countries, [Kumar and McLeod 1981], multinational ownership remains preponderantly in the domain of these developed countries.

According to Rolfe [1969:20], in 1966 the total value of global foreign investment stood at US$ 90-billion. Of this, the substantial majority of US$ 55-billion was owned by the United States alone, with Britain, France, West Germany, Canada, Sweden and Japan sharing the remaining US$ 35-billion in foreign investment.

Kumar [1980:3] indicates that the volume of direct foreign investment in 1973 stood at US$ 287.2-billion, a more than 300 % increase on Rolfe's OECD figures of seven years earlier. In 1973, the U.S. share, according to Kumar, was US$137.2-billion, the UK US$32.1-billion, followed by Germany, Japan and Switzerland with between $18b and $19b each, then France and Canada with 11.9 and 9.8-billion respectively. Using these statistics, Kumar points out that between them, these industrialised nations accounted for 86.9% of foreign direct investment. While the total volume and relative distribution of these foreign resources have altered, the relative North-South global balance has remained disproportionately in favour of the large industrialised countries.

Kumar further notes that while MNC operations are pervasive in the global south the bulk of world MNC's foreign investments takes place as cross investment among industrialised countries themselves.

> "About 76% of the total direct foreign investment, that is about 191.66 billion dollars, was in the industrialised nations in the year 1975. In the case of developing countries, while there has been a significant increase in foreign investment (from 32.55 in 1967 to 67.34 {$million} in 1975), its relative share has declined. It was estimated to be 31% in 1967 and only 26% in 1975." [Kumar 1980: 3].

However, despite this overall lower level of global MNC investment in the under-developed countries, such investments as exist are regarded as being of greater relative significance to the under-developed host country. In the Caribbean, for example, Levitt and Best note that the "dominant unit of production is a subsidiary or affiliate of a metropolitan firm." [1975: 42]. The importance of foreign investment, given the size of many of the economies concerned, is immense compared with cross investments in the large industrialised countries.

> "Although the developing countries have received only about a third of the total estimated stock of foreign direct investment, that is, only half as much as the developed countries, the presence of foreign multinational corporations in the developing countries is generally of greater relative significance, since their economies account for much less than half of that of developed market economies." [United Nations Report 1974:7].

The operation of multinationals tend to be a more sensitive issue where the external ownership establishes a vertical flow of profits from the subsidiaries in the global south to the investors and shareholders of the developed countries. Penrose [1968] regards the dominant industrialised nationality of the large international firm as being of special significance:

"in the first place, most of the shareholders of the parent are likely to share its nationality, and secondly, the foreign investment of a firm or 'group' is treated as an investment of the country in which the parent is incorporated. If there is little local ownership in the firm's foreign affiliates, there will be a flow of funds in the form of dividends from the firm as a whole, largely to citizens of the parent country. The particular geographical distribution of dividend outlays is, at least partly, a result of historical and institutional considerations related to the organization of the world's capital markets...." [Penrose 1968: 40].

It would appear, then, that despite the 'multinational' designation and global reach of these large firms, the primary beneficiaries are the investors and supporting institutions in a relatively small number of industrialised countries. These beneficiaries include shareholders in terms of dividends, the corporation itself in terms of growth, profits, royalties and power; as well as the home country which benefits in terms of raw material imports, balance of payments support and the foreign sale of capital goods, spares and services. Such is the classical scenario of exploitation and imperialism described by Kumar:

"Since the parent company does have a national identity, and since it is normally controlled by directors of a specific nationality, or a small set of nationalities, the spread of multinational enterprise appears to result in the perpetuation and intensification of hegemonic domination by the industrial capitalist powers. In short the national and organizational loyalties of transnational businessmen may be expected to fuse with imperialistic force." [Kumar 1980:84].

The industrialised states have shown in the past their willingness to support, protect and defend their multinationals against threats from alternative structures whether in the under-developed countries or from other competing industrialised countries or their multinationals. While the impact of this nationalism can frequently be reciprocated by cross investment among the industrialised countries, this is often not the case in the under-developed countries which operate mainly as hosts or offshore production platforms in the global FDI process.

The fusion of transnational business and hegemonic state power to which Kumar refers, was demonstrated earlier in the corporatist relationship which characterised the pioneering era in the global expansion of telegraphy. Private shareholders and the overall national economy in the industrialised home country, Britain, were the main beneficiaries of a global process described by Girvan as one of 'corporate imperialism' [Girvan 1976:11].

4.3 - APPROACHES TO CORPORATE CONTROL

According to Murdock [1982: 123], approaches to the control of large corporations vary according to two sets of conceptual categories. The first set is based on two alternative socio-economic perspectives underpinning corporate activities. These perspectives are (1) a straightforward capitalist-theory approach and (2) the pluralist industrial society approach. The second set of categories within these ideological perspectives relates to the factors used as the focus of any analysis: (1) whether the analysis focusses on the ACTIONS of personalities involved in the exercise of power within corporations or alternatively (2) whether analysis is directed more at STRUCTURES and factors constraining corporate decision-making:

> "Action approaches to corporate activity revolve around the conception of power. They focus on the way in which people, acting either individually or collectively, persuade or coerce others into complying with their demands and wishes. They concentrate on identifying the key allocative controllers and examining how they promote their own interests, ideas and policies. Structural analysis, on the other hand, is concerned with the ways the options open to allocative controllers are constrained and limited by the general economic and political environment in which the corporation operates. The pivotal concept here is not

power but determination. Structural analysis looks beyond the intentional action to examine the limits to choice and the pressures on decision making." [Murdock 1982:124].

Murdock argues that while there has been a strong tendency for these two approaches to be applied separately or even antagonistically, this represents a false dichotomy. We support his view that an adequate analysis needs to incorporate both the action approach, which asks the question "who controls the corporations?" and the structural approach which asks "what factors constrain corporate controllers?".

> "A structural analysis is necessary to map the range of actions open to allocative controllers and the pressures operating on them. It specifies the limit points to feasible action. But within these limits there is always a range of possibilities, and the choice between them is important and does have significant effects... To explain the direction and impact of these choices, however, we need an action approach which looks in detail at the biographies and interests of key allocative personnel and traces the consequences of their decisions for the organization and output of production."[Murdock 1982: 124-125].

In the case of the early development of Cable and Wireless, a structural analysis enables us to understand the role of the parent-state, Britain, as an important external influence on corporate policy within the company or its antecendents. The decisions, for example, of British telegraph firms to avoid intersecting non-British territories with their early telegraph cables flowed directly from the general demands of wider political and empire policy. Failure to observe this principle could have a devastating effect on the capitalist operation of firms which depended extensively on business income from government sources. At the same time, within such structural constraints, we require the flexibility of action-approaches to analyse the decisive role played by personalities such as John Pender and Guglielmo Marconi in creating some of these early corporate organizations and technologies which formed the foundation stones of Cable and Wireless PLC and of Caribbean telecommunications.

While we agree on the usefulness in employing both the structural-constraint and the individual-action approaches in our policy analysis, the same cannot be said about the use of both the Industrial Society and Capitalist orientations in the matrix proposed by Murdock. The theories of Industrial Society, as discussed by Giddens [1979: 100], is centrally concerned with industrial organization. Unlike the emphasis of the capitalist theory approach on issues of industrial ownership, industrial society theories associated with Saint Simon, argue that the importance of ownership as a vehicle of control declines with the rise in power of managerial elites and technocrats within corporations.

The professional managers and not the owners, it argues, are the new power brokers in a 'managerial revolution'. Applied in the context of mass media or other creative and technical fields such as telecommunications, this theory would argue that the most important decision-makers and corporate power sources are the administrators, producers, design engineers and software experts as well as the users and consumers, and not the corporate owners or directors in the boardrooms at headquarters.

The capitalist-theory approach, on the other hand, argues that the ultimate and most potent source of power, even in modern corporations, are the owners organised in the Board of Directors or specialist Committees of the Board overseeing specific policy areas. In this respect, it stands in direct contradiction with the pluralist notions of 'industrial society'. Capitalist-theory approaches, founded on the ideas of Karl Marx, are premised on a critique of the fundamental inequality in the ownership and distribution of wealth and property under capitalism.

Concentration in the hands of a relatively small capitalist class, of the means to produce this wealth, as well as the ideological apparatus in support of this order, is viewed as a source of disproportionate power and privilege. In this process of accumulation, however, the individual capitalist, as well as the class, are constrained by external economic and market forces as well as by intrinsic contradictions leading to strikes and other upheavals by an oppressed labour force or working class in general.

Applied to the communications industries, a capitalist-theory approach would argue that ownership and control of media and telecommunications networks are used by individual capitalists to enhance both their own further profit-making, as well as in the wider defence and protection of the capitalist class as a whole. Individual producers, engineers or administrators within these structures retain delegated power for only as long as they continue to operate generally in the corporate interests of the owners or their social class. Equally, corporate investment and collaboration abroad with countries or other firms external to the private corporation appear more likely to be conducted mainly in the interest of corporate owners than principally in response to public or consumer demands in host countries.

Synopsis

The capitalist-theory approach appears to be the more realistic and appropriate framework for our analysis of Cable and Wireless as a multinational corporation in the Caribbean. In the telecommunications sector within this region, the pluralist assumptions of the industrial society model are contradicted by the mainly monopoly nature of this service provider, its direct financial control methods, policy-making and profit remittance practices. But in applying the capitalist-theory approach of owner-dominance and control, it is important to take into acount the distinction between 'allocative' and 'operational' control.

Kotz describes allocative control as the capacity to determine the overall goals and scope of the corporation and the power to decide on how productive resources are deployed, while operational control primarily attends to the creative and profitable implementation of these allocative decisions [Kotz 1978: 14].

Firms, according to Penrose, are essentially planning units. "Their administrative structure usually permits an extensive devolution of authority to departments and subsidiary units, but even where there is a great deal of de-centralization of responsibility, the activities of established firms are nevertheless conducted within an administrative planning framework with recognized lines of authority and responsibility. Boards of directors, assisted by high-level committees are responsible for the general structure of the organization, lay down general lines of policy and provide for financial discipline and the appointment of senior executives." [1968:28].

In Cable and Wireless, as in many other similar MNCs, the critical instrument of allocative control is this "financial discipline', or in Brooke's terms, determination of the annual budget: "The core of a planning and control system is the annual budgets....Control over investment represents the ultimate control over the operations of a subsidiary, and, as such, is almost always closely held by headoffice." Brooke notes that the primary means of control was by limiting the amount of money which can be invested by the subsidiary without the authority of head-office [Brooke 1970: 96-103].

4.4 - INVESTMENT MOTIVATIONS

Hamilton [1986:17] indicates that among the many motivating factors for traditional transnational investment are cheap labour costs and higher profits related to resource extraction. Assured growth and reduction in uncertainty were often satisfied by the exploitation of cheap raw material resources. Additional incentives such as tax holidays and restraints on collective bargaining frequently spurred investment in industrial enclaves and export-processing zones (EPZs) in under-developed countries.

In contrast with this scenario, Jones [1986:8] found that among British firms, market attraction was a minority motive behind foreign investment decisions between 1914 and 1944. Presenting the results of a survey of fifteen private British manufacturing firms, Jones reported that the strategy of a majority of companies appeared to be defensive rather that aggressive. Tariffs and host government policies were among the most significant motivations reported, particularly tariff barriers in the United States during the second half of the 19th Century, when traditional British exports were being squeezed out. The involvement of the British state was a requirement in tackling these issues.

Increasingly then, overseas investment was being substituted for foreign trade, especially among large or industrialised economies. The basis for this, Enderwick argues, was that "some familiarity with the local market through initial servicing by export, reduces investment risk.." [1989:238]. Many of the earliest European 'free-standing' [Jones 1986:5] national firms started their global expansion in this way to help satisfy the export needs of the Industrial Revolution as well as to help overcome trading restrictions imposed on these products abroad.

Later, service sector firms were needed to support these primary investments, providing international networks in areas such as banking, insurance, legal services, advertising, news and other forms of communication [Jones 1986, Dixon 1986, UN Report 1974]. Other service enterprises, as Enderwick points out, entered some foreign markets independently, with the aim of profit generation in their own right, without the advance guard of manufacturing or extractive industries. Still others made investment abroad in response to home government incentives including subsidies and large government contracts [Kindleberger 1969:37-46].

4.5 - MNCs AS VECTORS OF INNOVATION

The multinational corporation, however, irrespective of its origins and antecedents, cannot be viewed exclusively as performing a colonizing role in the modern world, and many arguments have been advanced in its defence as a dynamic source of investment, technology and enterprise. Where limitations of local technology constrain progress, or insularity and national narrow-mindedness cloud wider visions of global economic interaction, the MNC is credited with the required scope and expertise to envisage and successfully implement projects on an international scale.

Hirschman, for example, suggests that, far from intrusive and pushy attitudes, MNCs may have been too reserved in the drive to overcome national or regional fragmentation : "it is the foreign investor's mousiness which deprives the policy makers of the guidance, pressures and support they badly need to push through critically required decisions and policies amid a welter of conflicting and antagonistic interests." [Hirschman 1972: 198].

Although not endorsing this perspective, Kumar nonetheless acknowledges that MNCs directly or indirectly, contribute to the growth of entrepreneurship: "They train their employees in management, marketing, public relations, production processes and related skills. Taking advantage of their training and experience, some employees establish their own businesses or move to other firms. In addition, the mere presence of TNEs can have some favourable psychological effects as it makes people aware of modern management techniques and production skills." [Kumar 1980:15]. The undoubted economic successes of some newly industrializing countries (NICs) particularly in the Asia and Pacific region, have been attributed to their open policies towards foreign direct investments and MNÇs.

Many of the arguments in defence of the MNC, have been presented, even if not always in very credible terms, by the MNCs themselves or their academic representatives. In a study conducted for the International Chamber of Commerce in 1969, Rolfe summarises many of the arguments which are still at the core of the modern defence of the role of the multinational corporation in contexts of economic under-development.

He argues that this form of private investment has many advantages over inter-governmental financial flows. Firstly it avoids the political strings of public finance, and secondly the investment is in equity capital and not debt, repayment for which is usually demanded on fixed schedules regardless of fluctuations in foreign exchange revenues or growth. The third set of advantages, which seem quite overstated in its claims, is outlined by Rolfe in much greater detail and is worth quoting at length:

> "Foreign direct investment initiates a veritable chain reaction of economic development capabilities. The international corporation transmits technological knowhow and access to new research developments. It trains and educates workers and managers, focussing their attention on the competitive process. It stimulates local entrepreneurship by encouraging independent firms to become suppliers to the international corporation - the process known as 'backward linkage' - as well as further manufacturers and sellers of products. In short, it transfers

> business technology - the skills of production, accounting, marketing, finance and personnel utilization, honed to the discipline of a competitive cost-price calculus. Where the international corporation manufactures goods for export..it provides those exports with ready markets through its affiliate channels, and in the process earns needed foreign exchange. Seen in this light, a nearly perfect symbiotic relationship would seem to exist between international corporation and the developing country [Rolfe 1969: 29-30].

A great deal of the currently available literature, while ascribing important global economic functions to the MNC, calls seriously into question many of the roles which Rolfe appears to have so glibly granted to the MNC. Brooke [1973] in a discussion of the organizational strategies of the multinational corporation, correctly rejects any idea of 'a near perfect symbiotic relationship' between MNC and under-developed host countries. He argues more realistically, that :

> "general policies and particularly financial policies in multinational companies are specifically designed to further the goals of the parent company, and only incidentally those of subsidiaries or host countries. Such a built in bias is bound to create conflict between the different parts of the organization, between the whole organization and its home and host

countries and between the home and the host countries themselves. Typical of such policies are the various schemes which are used to shift earnings from one country to another in order to avoid taxes, minimize risks and achieve other objectives." [Brooke 1973: 289].

This assessment by Brooke begins to provide important elements of the explanations for one of the critical questions of concern to us here: 'In whose interest does the MNC operate?'. Rolfe's claim of a systematic transfer of technology by MNCs would suggest that one of their primary functions is to enhance technological development in the Third World. This view is severely qualified by Hamilton's observation that, at least in manufacturing, "MNC's transfer old technologies to host countries." He argues that not only does this maximize their profits from research and development by extending the operational life of many lines of equipment or products, but it also ensures greater in-house control of the process of technology diffusion.

Some companies impose severe restrictions on the use of their technology, including controls on any independent local adaptations. In circumstances where a large proportion of this technology is inappropriate in original design and usage, such restrictions can significantly inhibit experimentation for local solutions. Taking into account the two view points, it would be reasonable to conclude that while MNCs can and often utilize advanced technology in the global South, they do so largely in their own self interest. The quality and appropriateness of the technology as well as the associated restrictions are also important issues in the process.

In some situations, more relevant to the service sector, the same arguments of inappropriateness can be advanced regarding training. Many under-developed countries lack the institutional and financial resources to provide training either in a local context or with an appropriate national orientation. The result is that this role, especially in technical fields, is performed within existing multinationals or their home countries. In such circumstances, trained managers or technical experts are subject to the priorities and agenda setting of the industrialised countries in terms of course content. Where the training takes place within a company, recruits from the south are also subject to transfers away from their national regions; and where it is not in-company, many trained specialists find it difficult to return to work in their national economies because of the disincentives of low pay, de-skilling resulting from workplace technology and circumstances and to some extent subjective social disorientation from their national environment.

Brooke's reference to MNC tendencies toward the avoidance of taxes through schemes to shift earnings from one country to another is rendered by Rolfe as channels for the ready export of locally manufactured products leading to important foreign exchange earnings. The more prevalent practice in MNCs appears to support Brooke's reference to what is often described as transfer pricing. Penrose describes how such transfers are implemented, resulting in not more, but less, foreign exchange earnings for a host country:

> "The prices charged to any given affiliate for the use of research results, 'know-how and patents, for managerial and other services and for goods supplied by the parent or by other affiliates, can be adjusted over a wide range depending on the particular circumstances. Costs must be allocated and transfer process must be set, but the choice of appropriate criteria is necessarily arbitrary from an economic point of view. Moreover, just what charges are made is often very easily concealed even from internal revenue authorities, and especially in countries whose administrative expertise is very limited or who are in a weak position to stand up to large international firms [Penrose 1968: 43].

Some MNCs are able, in addition, to take advantage of the location of subsidiaries in low corporate tax 'havens', to effect further tax minimization schemes, with major consequences for income distribution and the balance of payments position of other host countries.

Not all multinationals engage in such practices, but these methods are widespread enough to warrant attention. By such means as well as by legitimate business practices, the major multinational corporations have been able to earn higher profits abroad than in their home markets. According to Hamilton [1986:17], U.S. Department of Commerce surveys in the 1970s indicated that the dependence of U.S.-based MNCs on foreign profits has grown at an accelerating rate since the mid-1960s and there is every reason to believe that a similar trend is occurring for Japanese and European companies.

This is likely to be especially the case as competition intensifies among industrialised countries and among their large international firms for 'market share'. In such competition, where size and global power are important factors, the tendency has been towards the dominance of a few very large international operators controlling specific industries in the extractive, manufacturing and service sectors. This process was recognised by the U.N. Economics Department, which pointed out in its 1974 study that 'firms subject to oligopolistic competition frequently reach abroad in the effort to capture large shares of the world market' [1974:33].

In addition to business objectives linked to national goals, the outreach of many MNCs are still facilitated by their home government's financial support and pressures related to national influence and regional power. This aspect, in its more recent manifestation, is discussed by Webber, Moon and Richardson [1984] in relation to government financial support for the rapid expansion of the European Information Technology industry, and by Jones [1986] with reference to the origins of early British multinationals.

Synopsis

Multinational corporations can play an important role in the global disemmination of technical innovation, in training and in providing a dynamic productive element to stagnating national economies. But this role is carried out, first and foremost in the interest of capital accumulation on the part of the multinational corporation and its home government. The spread of technical innovation is not the same thing as the international transfer of technology. Many third World countries host the production of goods or the provision of services using advanced technical means, but still do not control or enjoy independent access to the technologies. Alternatively, old or inappropriate technologies are passed on to societies which are unable to independently evaluate their usefulness or technically incapable of adapting them to local requirements.

Where MNC training is provided, it can serve as a useful beginning for the development of the technical capacity and expertise of nationals in various sectors. However, much advanced level training from these sources is provided overseas andserve as techniques of acculturation of employees into company-specific values and often leads to a 'brain drain' away from either physical location or psychological commitment to national objectives.

In the case of the Cable and Wireless corporate practice, the company maintains training institutions in the Caribbean and other regions for entry level employees and workers employed in basic technical skill areas. But all senior level staff, managers and planners are trained at the company's Porthcurno training establishment in England. In this way, within the company, senior level training and promotion have become associated with overseas qualifications and attachments abroad.

4.6 - OWNERSHIP AND HOST COUNTRY COMPETITION

In terms of subsidiary ownership policy, multinational corporations appear to prefer their subsidiaries abroad to be wholly owned. On the other hand, as we noted from Article 44 of the annex to Caribbean Community (CARICOM) Treaty, regional states placed a high priority on 'increased..national participation in their economies'. The generality of this treaty clause, however, and its relegation to an annex of the Common Market provisions, reveal a sharp division among CARICOM member governments on the question of the extent of participation and control which should be exercised either from the instruments of regional integration or in national policy-making [Axline 1979: 142-145].

This division reflected the variation which existed in ideological outlook of member countries in the 1970s, as well as variation in internal economic structures. Guyana, which led the demands for a regional agreement on foreign investment, advocated strong policies of national state control and intermediate and community co-operative enterprise. The other MDC's to varying degrees supported stronger regulatory control over foreign investment. Trinidad and Tobago had long pursued nationalist policies in land ownership and to aspects of its petro-chemical industry. Jamaica, then operating within an ideological framework of 'democratic socialism' also supported investment codes including those over its bauxite and alumina deposits.

The Less Developed Countries (LDCs), however, considered themselves less able to impose conditions on foreign investment given their low levels of natural resource endowments and the openness and fragility of their economies. This situation constitutes an example of the duality and unevenness in development which the dependency theorists attribute to the variable, self-serving patterns of imperialist investment in the periphery, and which reinforce internal or regional divisions. At the July 1974 meeting of the CARICOM Heads of Government, a draft agreement on Foreign Investment and the Development of Technology, prepared by a working party, was presented for decision. However, given the marked differences within the movement on the issue, it was not surprising that the leaders were unable to agree on the terms of the Draft. To date, the issue has never re-emerged at the level of the Heads of Government for policy determination. The treatment of foreign investment therefore reverted to arena of exclusive national policy-making, a feature which further underlines the fragmentation of policy approach in the region.

In contrast to this fragmentation, multinational corporations with subsidiaries across many regional countries, maintain a single corporate strategy for the region, including policies of maximizing to the MNC the percentage of corporate ownership. Such increased ownership tends to accord more effective control by the externally-based policy-makers as well as by the locally-based expatriate operational controllers, over such critical areas as intra-firm transfers and technology protection. The optimum condition for such control, is of course, the wholly-owned subsidiary, an objective towards which Cable and Wireless policy in the more developed territories of the region appears to be geared.

Where the wholly-owned subsidiary dominates its sector, as is often the case in small island economies, it gains major opportunities for the appropriation of monopoly rents from sole incumbency or technological advantages in the host country. These special advantages, referred to as economies of common governance, provide the investing company with a strong competitive edge over other potential foreign competitors. In terms of local factors, however, some variations from this scenario can arise from the demands for participation by national governments, regulatory limitations and the need to diversify product lines by the incorporation of specialist inputs controlled by local entities.

The preference for wholly-owned subsidiaries appears to have developed as a major strategy among British multinationals only after 1945. The previous strategy among manufacturing multinationals favoured joint ventures, but this operated only until the British investing partners were sufficiently established in an overseas market to operate independent subsidiaries.

Jones [1986:11] argues that the management of these British firms, faced with a narrow range of options in manufacturing, initially welcomed joint ventures as a source of outside capital and technology. This strategy was particularly important for small firms, for whom joint ventures helped to spread risk. Jones suggests that besides increased business confidence, the reversal of the joint venture trend was also influenced by managerial and business disagreements. Table 5 indicates that while in the pre-1914 period 71 % of the firms surveyed were joint ventures, the proportion contracted to 33 % after 1945. And wholly owned subsidiaries increased from 29% before 1914 to some 67 % in the period after the Second World War.

In the period after the Second World War, therefore, the tendency was towards increasingly wholly-owned subsidiaries. However, in a significant minority of cases where this level of ownership did not operate, the resulting shared ownership also threw up its own policy requirements for management and optimal

TABLE 5

U.K. CORPORATE OWNERSHIP PATTERN 1914-1966

JOINT VENTURE VS WHOLLY OWNED SUBSIDIARIES

Status	Pre-1914	1914-1944	1945-66
Wholely-owned	29%	47%	67%
Joint Venture	71%	53%	33%
# of Subsidiaries	24	34	15

Source : Survey by Geoffrey Jones 1986:10

methods of control. In the absence of total control, most investing MNCs prefer majority control of both operations and profit allocation, "although at times, such control can be exercised from a minority position." [UN Report 1974:15]. As an indication of this greater MNC preference and support for wholly owned or majority controlled subsidiaries, the U.N Department of Economic and Social Affairs found that in the mid 1970s "At least 80% of U.S. affiliates and 75% of U.K. affiliates are either wholly-owned or majority controlled. In terms of stock of investment, these two countries have placed about 90% in affiliates that are at least majority owned.".

Like most other forms of business enterprise, the multinational corporation exists to maximize its economic advantages. In most cases it targets increased productivity and higher profits. Its ability to do so and to adapt and grow in the process, contributes to its permanence as a viable institutional form. Kindleberger [1969] points out that, though necessary, these are not sufficient conditions for the operation of a world class multinational company. The corporation, he says, also needs to be 'indispensable', performing for the world or its host country functions which no other institutions are perceived to be able to carry out as efficiently in similar circumstances.

In competition with national firms in host countries, the aim of the multinational enterprise to be indispensable can often easily be accomplished through economies of scale, particularly in production operations where its critical mass accords major advantages. Such economies can be complemented by special access to parent-company services, including the intra-firm transfer of production or process inputs, the availability of advanced technology or specialised staff, as well as the application of internationally tested production and control procedures, based on superior research and development (R&D) facilities.

On the other hand, MNCs sometimes operate in situations of no significant national competition, as is the case with Cable and Wireless in the Eastern Caribbean, and to a lesser extent in the more developed parts of the region. Competition from other MNCs in telecommunications is traditionally inhibited by the firm's advantages of incumbency, re-inforced by exclusive long-term licences or contractual arrangements.

In many circumstances, such as where the internal technological base is weak, only another multinational firm may be equipped to secure a market share against well established MNC operators. While initially introducing an element of competition, such a situation often results in important national sectors being controlled by oligopolies. Where, however, indigenous competition exists, the multinational corporation can face significant disadvantages. These can arise in local markets where the national competitor, being smaller, can often be more easily managed; where the competitor enjoys a greater familiarity with the nuances of the indigenous market; and where the competitor may be accorded special concessions flowing from its local nationality.

Under such conditions, the traditional key intrinsic requirements for an 'indispensable' level of corporate performance by the multinational corporation are described by Enderwick [1989:17] as the need for 'firm specific advantages' (FSAs). These are distinctive qualities which are transferable within the international company to its subsidiaries abroad. These specific advantages, varying in significance from firm to firm, include such features as international reputation, goodwill or brand-name, specific production or marketing practices like fast food output techniques or emphasis on special types of high quality products. Firm specific advantages provide a basis for product or service differentiation derived from company history, policy, technology or business practice. It is these advantages which the MNC can deploy in outstripping local competition and in dominating markets.

To gain advantage, particularly in competition with other multinational corporations, the large international firm also traditionally requires 'location specific advantages' (LSAs) [Enderwick 1989 :18-30]. These advantages are achieved by consolidating a base in the host country or from acquiring multiple site or service locations in a national or regional market. Locational advantages can also be acquired by securing a presence in, or alternatively away from, a geographical concentration of firms specializing in common products or services. Extractive multinationals, for example, would not enjoy these advantages if they were not prepared to establish mines in locations of richest mineral deposits. A national mining enterprise, on the other hand, may lack this capacity to quickly re-locate, and in this sense, the MNC enjoys the economic advantages of locational flexibility.

As conceptual tools, both firm specific and location specific advantages, have been traditionally applied to manufacturing and extractive industries. As we are concerned here with a service-sector firm, it is important to examine how useful these concepts are to the activities of the tertiary sector. Enderwick has noted that both these types of advantages can be successfully applied to MNCs in service areas as diverse as accounting and news agencies. However, he advises that important modifications may be necessary in applying the concepts globally across the heterogenous range of services.

The experience of Reuters News Agency in the Caribbean, for example, helps to reinforce this cautionary note in terms of universal application of these principles. Reuters, as a service-oriented multinational company, established a Caribbean Bureau for the first time in 1974, after years of 'servicing' the region from its London headquarters. In the company's calculations, this regional location was an advantage it lacked in the face of expected competition from the then emerging regional Caribbean News Agency (CANA). Within two years, however, the Reuters Caribbean bureau was abandoned, overtaken by local competition. In this case it was the local competitor, CANA which enjoyed the firm specific advantage [FSA} of writing from a distinctive regional perspective, which it combined with location specific advantages of bureaux in several national capitals of the region.

This particular case indicates that LSAs and FSAs are by no means the exclusive preserves of multinationals in the service sector, where sometimes more personalised, indigenous or small-scale characteristics are distinct advantages. Nonetheless, in other services requiring greater levels of technology, international bargaining or specific management expertise, the peculiar advantages of multinational corporations may far outweigh other attributes of local competition. The telecommunications sector, with which we are concerned here, falls more within this category.

4.7 - CONCLUSIONS

The foregoing discussion of multinational corporations in the global economy, though not exhaustive of the topic, is sufficient to indicate the formidable scope, power and array of techniques which such companies have at their disposal in their relationships with host countries. In the face of this, we have tried to show the particular vulnerability of the economically under-developed host countries, and especially small island economies such as those which characterise the economic landscape of the English-speaking Caribbean. Where such countries are internally weak or regionally divided, the multinational corporation enjoys greater scope for optimum control of policy within its sector by dominating ownership.

We have presented the arguments, as put forward by the leading researchers and theorists, of both the benefits and the apparently overwhelming disadvantages to national economies of pervasive multinational control. MNC's can play an important role in the global spread of technical innovation, but this is a different function from the transfer of technology. While many multinational corporations are keen to operate with the most advanced technologies, they are reluctant to impart these technologies to host countries. Brooke suggests that where such technology is made available, it is sometimes outdated and inappropriate. The general policies of MNC's, he notes, "are designed to further the goals of the parent company and only incidentally those of the ..host countries."

Despite the disadvantages in their relationships with MNC's countries of the global South face a dilemma in the absence, in extant circumstances, of clear-cut viable and less costly alternatives. The situation is worsened for these countries by the lack of indigenous policies and planning structures. The MNCs are able, through highly developed techniques, to make their services appear 'indispensable', and so maintain their global expansion and consolidate their advantages over competition from privately operated or state-run local enterprises.

We have shown how the MNCs operate mainly from head-offices based in the capitals of the western industrialised countries and how their activities abroad are often carried out in close collaboration with these home governments. Contrary to Rolfe's perception of a "nearly perfect symbiotic relationship between the international corporation and the developing country." [1969 :30], it appears that it is the collaborative relationship between the MNCs and their home government which constitutes the more dicisive nexus in the global power and presence of foreign direct investment.

As we have argued, the foreign and economic policies of these developed countries, under more recent neo-colonial conditions, is increasingly being mediated through global multi-lateral agencies such as the International Monetary Fund (IMF) and the World Bank, creating additional advantages to the MNC. IMF demands for government divestment and privatization of telecommunications systems in the under-developed countries, for example, are likely to operate in the interest of the foreign multinational corporations, which are frequently the only entities, governments aside, with the necessary resources to acquire the de-nationalised firms and industries.

This situation raises the issue of whether these agencies are the modern collective successors to the more traditional processes of colonialism and conquest once pursued by individual European states. And a parallel question is whether, on the global scale, the modern MNCs are the main beneficiaries of the policies of these institutions. While detailed investigation of these issues is outside the scope of our current study, they arise here because of their integral connection to the issue of the role of telecommunications in development when the telecommunications companies are externally owned and the state systems in host countries like those in the Caribbean, historically weak.

At the same time, our analysis of the failure of CARICOM proposals for a common approach to foreign investment, offers some insight into why many poor countries retain or invite multinational firms into their territories, often without equity participation or adequate regulatory controls. In part, our foregoing discussion of the economies of scale, historical incumbency, carefully cultivated images of 'indispensability' linked to monopoly contracts and support from industrialised home governments, provide us with important elements of the answer. The combined effect of these factors accords with our earlier analysis of imperialism and its traditional and more modern consequences of dependency and multinational dominance.

Writing from a Caribbean frame of reference, Girvan expressed this power relationship between the imperialist state and the multinational corporation as 'corporate imperialism': "Dependence, underdevelopment and endemic conflict are related to the integration of these economies into a system of corporate imperialism. By corporate imperialism, we mean a system of international capitalism that has two basic characteristics.

First, fundamental power in this world system is held by the owners and managers of capital, who exercise this power over other groups and institutions in order to appropriate surpluses and accumulate further capital.These other groups - governmental bureaucracies, workers, peasants and the unemployed, are to a greater or lesser degree dominated, dependent, exploited and underdeveloped. The second crucial feature is that these relationships are institutionalised within the framework of large, integrated transnational corporations. The TNCs as a group constitute the institutional base of the system; individually, they are its principal instruments of action. The hierarchy of roles and the network of dominance/dependency relationships within the individual corporation are a microcosm of the roles and relationships within the total system of corporate imperialism..." [Girvan 1976: 11-12].

But, these global factors alone, important as they are, do not provide a complete and adequate explanation for persistent under-development and debt, existing side by side with multinational affluence and growth in these economies of the south, including in the Caribbean. As we argued earlier, problems of internal weakness [Krasner 1985:4], difficulties of policy formulation and implementation, class and social inequality as well as regional disunity, are also central factors inhibiting development and greater control over external forces.

Nonetheless, the fore-going discussion provides us with a useful analytical context within which to examine the policies and economic activities of Cable and Wireless as a multinational corporation with over one hundred and twenty years of involvement in the Caribbean.

CHAPTER 5

MULTINATIONAL ANTECEDENTS OF CABLE AND WIRELESS

On the basis of the features identified by both Dunning and Penrose, as well as the definition applied by the United Nations Department of Economic and Social Affairs, it is clear that the company which is the focus of this study, Cable and Wireless, classifies as an established multinational corporation. Although becoming re-geared as a private MNC only since divestment less than a decade ago, our study indicates that the Group has a long tradition in MNC investments and outreach. The company's history dates back to over 140 year ago, when a series of acquisitions of small telegraph firms led to the establishment of an early conglomerate: Eastern and Associated Telegraph Companies. Cable and Wireless is the result of further mergers mainly between this group and Marconi Wireless Telegraph Company, which pioneered long distance radio communications as an alternative or complement to cable.

In this chapter we present and consider the data on the formation and growth of Cable and Wireless as a multinational corporation. Because we aim to conduct this analysis in the framework of the company's close association with the British State and colonial empire, we begin with a brief examination of the Group's British nationality and instances of the role which this relationship between the parent state and C&W has played in early telecommunications policy in the periphery. We then turn to the historical processes leading to the formation of the Group and the origin of its influence and dominance in the smaller British ex-colonies, such as those in the Caribbean. The on-going interplay between the private and state sectors in the ownership and formulation of policy for the early telegraph, wireless and later combined telecommunications systems receives particular emphasis.

5.1 - BRITISH NATIONALITY AND STATE INFLUENCE

In 1988, Cable and Wireless PLC spanned some 46 countries [Financial Times Business Information 1988: 99], covering regions as varied as Asia and the Pacific, the Middle East, Africa and the India Ocean area, Europe, the Caribbean, Latin America and the United States. In the same year, it was operating some 39 declared major subsidiaries or associated companies in these areas. The worldwide activities of this British conglomerate are co-ordinated from corporate headquarters in London, by a Board of Directors consisting entirely of British nationals.

These features are not only consistent with Dunning's model of a geographically diverse global network 'under the control of a single institution'[1971:16], but also with Penrose's and Kumar's characterization of MNCs as being typically owned in the industrialised global north, with 'most of the shareholders of the parent...likely to share its nationality [Penrose 1968:40]. According to the company's 1989 Annual Report, the seven locations for shareholders meetings were London, Cardiff, Leicester, Edinburgh, Liverpool, Leeds and Brighton, all U.K. cities. Similarly, according to the company's 1989 Annual Report [40], all thirteen members of the 'Court' of Directors were British. Notwithstanding the company's wide international profit base, therefore, its exclusive U.K economic ownership structure, directorate and executive management, conform to the typical MNC practice of confining ownership and control of the parent firm primarily to home-base nationals.[Poulantzas 1975: 18 -20]. As we saw earlier, this a policy about which some theoretical and policy observers have been critical.

Equally, consistent with our earlier discussion, Cable and Wireless operates a subsidiary ownership policy based on a preference for wholly-owned subsidiaries, and where this is not possible, it seeks for majority shareholding or other means of effective control over its investment units. In the Caribbean, for example, the government of Antigua and Barbuda encountered strong resistance, while still a British colony, to its attempt to secure by negotiation some equity participation in the wholly owned Cable and Wireless subsidiary which had traditionally operated the country's overseas telecommunications network. According to the local Minister of Communications, "government's attempt to participate in Cable and Wireless has been stringently resisted. In 1978, when negotiations began, we had to back off, because we were in the heat of independence talks and no other island in the British West Indies had to go through the strong test which we were forced to undergo. It was then felt to shelve it because it could have created another obstacle."[Vere Bird Jnr in CANTO Conference Proceedings 1989: 250].

Similarly, in the early years of Cable and Wireless' penetration of Hong Kong, the company, then commercially run under British government supervision, utilised its connections with the parent State to advance its hold on services in the colony. In a confidential exchange of correspondence with the company in 1944, the Colonial Office indicated the conditions under which certain services in Hong Kong were transferred to Cable and Wireless: "When the negotiations were conducted in 1937, as a result of which an exclusive licence was granted to Cable and Wireless Limited to supply and operate the external fixed station commercial radio communications of the colony, certain services, eg. mobile, meteorological, broadcasting, aeronautical, police, harbour, navigation, multiple wireless news service etc. were reserved for the government. The commercial radio communication of the colony was a source of substantial revenue to the Hong Kong government, and CONSIDERABLE PRESSURE HAD TO BE EXERCISED ON THAT GOVERNMENT TO PERSUADE THEM TO HAND OVER THE SERVICES TO CABLE AND WIRELESS LIMITED IN RETURN FOR AN ANNUAL SUBSIDY." (my emphasis)[Public Records Office File CO 937 11/6, 1944].

Both the relatively recent case of Antigua and these earlier 'negotiations' in Hong Kong, illustrate the resistance of the company to host-country ownership or equity participation in profitable telecommunications ventures. But they also demonstrate the critical alliance which frequently operates between the multinational corporation and the home government. In one case, it was the perception of a host country minister that negotiations for national independence from Britain could have been compromised by any sustained demands for host-government participation in the equity of a British multinational firm. In another it was the actual exercise of imperial State power over a colony which secured control of the sole viable segment of the telecommunications system for the company. It is on this foundation that Cable and Wireless, now a private conglomerate, can describe Hong Kong as a location at which the Group "has established market leadership" [Annual Report 1988:13]. It is also largely on this basis that Cable and Wireless has survived and expanded as a multinational corporation.

According to Roger Cowe of the Guardian "cash from the territory [Hong Kong] has paid for the huge investments in Mercury and in the international fibre optic network which the company dubs the 'global highway'" [14/6/90:9]. Initial access to this originally profitable location was provided on a monopoly basis to Cable and Wireless by the political dominance of its home government over the colony. Although the company's own investment has contributed to Hong Kong's profitibility as a telecommunications market today, the early role of the British government in the colony, as in Antigua, appear to lend support to Kumar's view that "the national and organizational loyalties of transnational businessmen may be expected to fuse with imperialistic force" of their home governments for the creation or preservation of MNC markets and control [Kumar 1980:84].

Synopsis

The indications from these two cases would seem to support the view that it has largely been the pervasive influence of the British imperial state which historically operated as a midwife to the emergence and early development of Cable and Wireless in the Caribbean. The indications from Antigua suggest that while this British state influence may be on the wane since the era of de-colonization, it has not been eliminated as a factor in telecommunications policy-making in the contemporary Caribbean. The historical evidence also suggests that this State/company interaction was even more dominant among the small colonised territories of the region, providing fruitful soil for C&W's antecedent companies.

5.2 - MNC ORIGINS AND TRANSITIONS OF C&W.

The most widely held existing perception of the large multinational corporation is probably that of a privately founded and commercially run conglomerate. In an initial interview, [23/2/89], the Cable and Wireless archivist Peter Travers-Laney emphasised that, unlike this scenario, Cable and Wireless had emerged through a much more complex series of transitions, including multiple mergers, government regulation and eventually, outright government ownership. In all this, however, its mandate to generate profit from investments and subsidiary offices particularly in the British sphere of influence abroad, had remained intact since its late 19th century formal beginnings.

Geoffrey Jones notes that until 1939 Britain was the world's largest multinational investor. "The roots of this investment go back to the Nineteenth century, when Britain was the world's largest capital-exporting economy. It used to be maintained that the bulk of this capital was portfolio investment, involving the acquisition of foreign securities without any control over the foreign institutions or companies concerned. However, it now seems that as much as 40% may have taken the form of foreign direct investment, involving the ownership and management of a foreign operation." [Jones 1976:3]. It is not surprising, therefore, that one of C&W's main antecedent companies, The Eastern Telegraph Group, was one of the most well-established British multinational corporations of the 19th century.

Though not the leading investor, the founder of the Eastern Telegraph Group, John Pender was a shareholder in the first successful transatlantic submarine cable laid in 1866. The completion of the cable represented a strategic triumph for the colonial authorities who earnestly required rapid and reliable long distance communications with the outer reaches of a far flung empire. But, it also represented a commercial and technological watershed, in terms of the potential earnings from the manufacture and laying of vast stretches of cable in the service of both business and government. Pender, a Manchester based textile manufacturer, was also involved in the manufacture of telegraph cables, as Chairman of TELCON, the Telegraph Construction and Maintenance Company. According to Baglehole [1969:1], Pender also felt that investment in submarine cables in the Mediterranean region offered bright prospects both for immediate returns and for future expansion to link the great colonial capitals of Asia to their global centre in Britain.

In discussing large corporations and the communications industry, Murdock urged consideration of both who controls the corporations as well as what structural factors determine corporate decisions [1982: 124]. Placed in this context, both John Pender as a leading actor, and the 19th century conglomerate Eastern Telegraph, which he led, performed significant roles in the early development of Cable and Wireless. Pender was motivated by the need for greater efficiency in capital accumulation from raw material in the British colonies of the East. The corporate corollary to improved political administration with the telegraph was that arrangements for the shipment and importation of textiles could be more efficiently and profitably handled through improved communication. Pender became personally committed to this business objective and invested significant portions of his textile fortune in the telegraph. Eventually, cable manufacture and telegraphic services also became profitable ventures in their own right and were vertically integrated into his corporate empire.

Pender, therefore founded the Anglo-Mediterranean Telegraph Company in 1866, and soon afterwards a clutch of other companies, including the British India Submarine Telegraph Company, and the Falmouth, Gibraltar and Malta Telegraph Company Limited. His own cable construction company, TELCON, formed the home base of an extensive investment in the telegraph. Pender's early strategic objective was the control of all colonial cable communication to and from the eastern sector of the British empire, with the primary aim of joining the different subsidiary lines to create a direct link between India and Britain. This objective was achieved in 1870, marking the first chain of Eastern submarine telegraph cables to link directly with the early British mainland cable network [Baglehole 1969:3]. It represented an improvement on the earlier but more circuitous route to India established in 1865 [Barty-King 1969:19].

By 1872, the chain of companies involved in the linkage with India were merged to form the first global conglomerate to which the continuity of Cable and Wireless as an MNC may be traced. Eastern Telegraph Company had a capital of £3,397,000 and gross revenues of £376,900. According to Barty-King [1979:79] its assets included 8,860 miles of submarine cable, 1,200 miles of land line, 24 stations worldwide and two repair ships. Besides the initial chain of cables to India, Pender embarked on a strategy of globalization of his investments beyond Asia and the Mediterranean. He founded the British India Extension Telegraph Company Limited to link India with Singapore and the Far East, as well as the British Australian Telegraph Company to extend the network to Australia. Even earlier, in 1869, Pender had also established the China Submarine Telegraph Company which linked Saigon, Hong Kong and Singapore. As with the pioneering companies which created the link to India, the companies of the Far East were also merged by 1873 to form the Eastern Extension Australasia and China Telegraph Company Limited [Baglehole 1969:4].

As would be expected, John Pender's Group was by the mid 1870s in a position to project its corporate power into the transatlantic and South American regions, where a number of smaller independent telegraph companies had started operations. Among these independent companies was the Great Western Telegraph Company, formed in 1872 to link the U.K. with New York and to extend the telegraph lines southwards to Brazil. Even while this project was underway, the Eastern Telegraph Company established a competing subsidiary, The Brazilian Submarine Telegraph Company in 1873 to link Brazil and other locations in South America with Europe via Portugal. Again with the technical support of Pender's Cable Manufacturing company TELCON, and his cable ships, the company successfully completed this Lisbon to Pernambuco line by 1874, thereby establishing a firm foothold in the telegraph concessions business in the Western world.

Many other such South and Central American companies fell to the Eastern conglomerate, including the eventual takeover of the independent competitor, the Great Western Telegraph Co. From this initial South American foothold in Brazil, the Eastern Telegraph Company and its associated manufacturing arm TELCON rapidly expanded into Latin America. "In 1876, TELCON formed the

West Coast of America Telegraph Company to run the telegraph they had built linking Peru with Chile, the Lima Valparaiso line. The company was re-constructed the following year and given closer ties with John Pender's Eastern Company" [Barty-King 1979: 51]. By the end of 1887, notes Barty-King, the company's official historian, "it owned 22,400 miles of submarine cable and had sixty four stations...The capital was£5,900,000 and gross annual revenue of£650,971." [1979:76]

Important policy implications can be surmised from this global process of expansion by Eastern Telegraph Company and other early ventures in telegraphic cables. In the first place, we are concerned to establish to what extent this expansion was materially or otherwise supported by the home government, Britain, which was then a major industrial power and centre of a vast colonial empire. And, secondly, we hope to show the initial resistance by the state to accommodate the new and alternative technology of wireless which was perceived as a threat to the economic interest of the cable interests with which the authorities traditionally identified.

British government policy on 'ocean telegraphy', as with inland telegraphy initially, was the promotion of British private investment in the cable industry, in improving message quality, expanding cable routes and in monitoring rates and tariffs. Parallel to this aspect of official policy, however, was the provision of the political backing, such as we saw in the case of Hong Kong, technical support including the use of the vessels of the British navy, and financial support in the form guaranteed subventions for schemes in which government had a political interest, such as communication with India and across the Atlantic.

The government's dual policy of private sector ownership with public sector subsidy was most dramatically demonstrated by the early case of the Red Sea and Telegraph to India Company in 1858.According to Barty-King, the British government undertook to provide this venture with a subsidy of 4 1/2 % of its total capitalization of£800,000. The only condition imposed for this subsidy was the successful operation of the line between Suez, Aden and Karachi, with an eventual link to Britain. Despite its monopoly position, the company's attempts to lay the required lines failed.

However it continued to receive the government subvention, with an accumulated total loss of£1,800,000 [Barty-King 1969: 15]. The failure of this model of public support for private ventures gave rise to an overall review of policy by a government Committee of Enquiry in 1859. The Committee's conclusion, however, focussed more on the technical shortcomings of the process. However, the experience led to more caution in the commitment of public funds for such ventures, and to the introduction of legislation, including a strengthened Limited Liability Act to protect shareholders.

The development of a strong lobby of cable investors sought to reverse the official reluctance to offer subventions. By the time of the launch of the pioneering transatlantic cable in 1866, this policy reservation had been overcome. The Atlantic Cable company, in which John Pender was an early investor, managed to secure an 8% guarantee on its capital of£600,000, involving the payment of £20,000 a year from the British government and a similar sum from the government of the United States [1969:16]. An identification of the interest of the state for an expanded cable network, and that of the company for government assistance proved a powerful motivation for the alteration of policy. Thereafter, subventions and other forms of support from the British government and its colonial administrations overseas, became an integral part of public policy towards private cable and telegraph investments.

British cable policy was directed towards active support for private ventures such as Eastern's - a policy which secured for Britain a pre-eminent role in global cable manufacture, ownership and maintenance.[See network maps in Appendix]. The state relationship with the dominant Eastern Telegraph group supports the explanations of Foreman-Peck, offered earlier, for the success of this policy: "The political situation in continental Europe and similarity of resource endowment, historically, directed British economic interests into long distance trade and specialization, importing food and raw materials and exporting manufactures and semi-manufactures. So in the 1850s, Britain's most important trading partner was the independent U.S., and second in importance was the colonial

Indian empire. Naturally, communication with these two areas was a priority, hence the State support, both for reasons of imperial security and economic interest."[Foreman-Peck, Correspondence : 10-7-90].

The role of Eastern Telegraph Company Limited raises the issue of the monopoly control which dominated the operation of global telecommunications in the latter half of the Nineteenth century. John Pender's original industrial connections related to textiles, the manufacture and trade in which brought him into contact with Eastern reaches of the empire. The principal source of raw cotton, then, was India while that for wool was Australia, New Zealand and several other territories in the East. As private entrepreneur, he, like the public administrators in government, recognised the great potential for the enhancement of trade which the new telegraph technology represented. Although he first invested in the pioneering transatlantic submarine cable, Pender the textiles manufacturer was soon to focus his own initiatives on communication with Asia and the Far East. This was a route which also suited the imperial involvement in India, led by the Colonial Office.

What resulted was an extraordinary industrial concentration, which dominated the cable and telegraph industry in England, Europe and the British empire through most of the latter half of the 19th century. Despite attempts to break its monopoly control, the Eastern Group remained dominant. This may be accounted for in part by the political connections in Britain of the company's leading directors, particularly Pender. Britain as an industrial power faced competition from the French and particularly the Americans. The government in London, therefore preferred to support a British firm with an established performance record, and was not particularly concerned with its monopoly position, once the firm could preserve British control over the cable routes by confining them to British territories. TELCON, a part of the group, was independently an important source of external earnings for Britain, manufacturing and laying 80% [Foreman-Peck] of the world's undersea telegraph cables in that period.

Besides such geo-political considerations, other important economic factors also contributed to this powerful convergence. The original motivation of enhancing the trade in textiles from the East were overtaken by a direct economic interest in the telegraph itself. Business units were therefore established in such colonial centres as Singapore, China, Malta and in India, to exploit the new technology of cable telegraphy. As these developed, a series of mergers reduced overhead costs, and economies of scale were effected by such backward and forward linkages as cable manufacturing and maintenance by TELCON and the opening of service bureaux directly to the public. Eastern thereby successfully employed multinational practices of direct investment and the establishment of subsidiaries, which though registered in Britain operated extensively overseas.

In addition, as we noted in discussing the character of large international companies, the factor of size creates important advantages in undermining competition from smaller rivals. This factor enabled the Eastern conglomerate to dominate its sector. By 1873, when inter-governmental decision-making on tariffs was in force, Pender sought to reduce the impact of this rate regulation on any single cable route by cross-subsidizing routes through the merger, for example, between British Australian with the China Submarine and the British Indian Extension companies to form the powerful Eastern Extension Australasia and China Telegraph Company. An additional economic factor was the high fixed cost and low variable cost of cables, which constrained the entry of smaller firms. This factor "created some elements of natural monopoly, while national restrictions on landing rights established barriers to industry entry." [Foreman-Peck, Correspondence 10-7-90].

By 1875, certain particularly keen shareholders began to criticise what then appeared to them as questionable intra-firm transactions in which existing routes were being duplicated, possibly with colonial subsidy, with the cable being manufactured by group company TELCON. Accusations about "arrangements with the Construction company" and practices of "jobbery" led to heated exchanges at Eastern Telegraph's Extraordinary General Meeting on December 16, 1875. ['Reports and Accounts and Proceedings at General Meetings' for Eastern Telegraph Company Limited, from 1872, C&W Archives, London].

Sir John Pender's upper class background, his extensive involvement in British Parliamentary politics and his established corporate standing in the textiles sector were likely to have enhanced his capacity to withstand or counteract such criticisms and to maintain the momentum of expansion of the Eastern Group of Companies overseas. As chief architect of the expansion, Pender served for many years as a Liberal-Unionist member of the British Parliament. Barty-King notes that Pender "moved in high political circles, and claimed with some reason, to have the ear of government ministers" [1969:55]. His "skilled extra-parliamentary agitation", even while out of office was a noteworthy part of his overall drive for control and expansion within the telegraph industry of the nineteenth and early twentieth century. These factors are consistent with our earlier view, in agreement with Murdock, that while structural factors such as company size and state support are important in corporate control, so too are the individual action and power factors such as who controls the corporation [Murdock 1982: 124].

As the Eastern Group entered the Twentieth century, two important factors had a decisive impact on its future operation and on the private telegraph cable industry in general. The first was the introduction, at the instigation of the Canadian colony, of a competing publicly-funded company within the empire's telecommunications structure, called the Pacific Cable Board (PCB). The second was the development and eventual acceptance of Marconi's wireless telegraphy as an alternative to cable telegraphy and as an intermodal competitor to the Eastern Telegraph monopoly. Our examination of these two developments are in the context of their influence in challenging the Eastern

Telegraph Company's comfortable monopoly on both the routes and the technology in early 20th century telecommunications. We examine the determined resistance of the entrenched Eastern Group and the attitude of the British state, to this innovation. We are concerned with the influence of these new actors on the reformulation of telecommunications policy both in the wider empire and in the Caribbean colonies.

5.3 - THE PACIFIC CABLE BOARD

The idea of a trans-Pacific cable was first mooted by the Canadian engineer Sanford Fleming in 1879. His proposed cable would extend from the Australasian colonies through to Canada and on to England. His plan was designed to create an alternative route to the monopoly enjoyed by the Eastern Telegraph Company, and in this way reduce the tariffs charged by Eastern. This was a scheme to introduce meaningful competition into empire communications, to allow for participation by the emerging self-governing colonies and dominions and thus "bestow upon South African, Australian, Canadian, Englishmen, Scotchmen and Irishmen, West Indian and East Indian, the great boon of cheap telegraphy." [Johnson 1903:300].

The motivation of this project, then, was to acknowledge and give practical expression to the rising nationalism and keen interest of the Nineteenth century colonial periphery around issues of technology transfer, and economic independence. But the practical factor of inordinately high telegraph tariffs imposed by Eastern's monopoly position, provided the immediate agitational basis for proposing alternative structures. As could well be expected, the Canadian proposal drafted by Fleming incurred both the vigorous opposition of the Eastern conglomerate and the passive resistance of the imperial authorities in London. Fleming himself noted that "the mere advocacy of the Pacific Cable has already benefitted Australia by lowering charges levied on messages fully fifty per cent." [Fleming 1901:32].

As part of its opposition, the Eastern Company consistently lobbied the British government, and presented a range of technical problems which it claimed could be anticipated by the laying of cables in the 'jagged precipices' of the Pacific Ocean. Eastern was acting in defence of its monopoly route eastwards from Europe to India, Australia and New Zealand. Besides waging a shrill propaganda campaign, the Eastern Group began to negotiate exclusive long term agreements, specifically excluding any new entrant. As part of this, exclusive access to the British colony of Hong Kong was secured by the Eastern Group: "Under the agreement, dated 28th October, 1893, the Eastern Telegraph Extension Company strengthened its monopoly by having Canada and the Australasian colonies telegraphically excluded from Hong Kong and forbidden to lay, or assist in laying, any new cable to that port for a period which does not expire until twenty years from the present date.(1898)" [Fleming 1901:19].

The determined bid for liberalization by the Canadians, however, was undeterred. "Fleming had to overcome first of all the apathy and indifference of the people of the great self-governing colonies; then the masterly inactivity of the British government; finally the active, resourceful and powerful opposition of the group of wealthy cable companies which held a monopoly of the business between England and Australia, and, naturally enough, were loath to part with it." [Burpee 1915:154].

With the support of some of the Australian provinces, Canada managed to secure a preliminary discussion of the proposed scheme at the 1887 Colonial Conference in London. To build on this, the Canadians undertook the hosting of another in the regular series of Colonial Conferences, this time in Ottawa in 1894 with the proposed Pacific Cable as a major item on the agenda. At this meeting, much progress was made in undermining the influence of the Eastern Group. There was preliminary agreement on a possible joint venture between Britain and the dominions in the establishment of the Pacific cable route. Two years later, in 1896, a Pacific Cable Committee was formed to make recommendations on a formula for ownership. The Committee recommended an approximate three way split of ownership between Britain, Canada and the Australian states, with New Zealand as a a minority partner. [For detailed share allocation see Baglehole 1969:13].

Significantly, those colonies included in the scheme, and particularly its protaginist, Canada, were staking an important nationalist claim to a share of ownership and power over their telecommunications environment. Mainly, they wanted reduced rates which would enable access to the telegraph by a greater number of people and not just the government and business interests. The role of unwilling partner initially played by the imperial government in Britain is consistent with its traditional support for its own British entrepreneurs, and the Eastern group in particular. But other judgements also increasingly had to be taken into account, including the possibility of London being excluded from this inter-colonial joint venture among some of its largest and most important self-governing dominions.

In 1901, after further negotiations, the British Parliament passed the Pacific Cable Act, setting up the joint venture Pacific Cable Board "to provide for the construction and working of a submarine cable from the island of Vancouver to New Zealand and to Queensland." [Baglehole 1969:13]. The project marked the first major involvement of the British government in direct ownership of trans-oceanic submarine cables, although decades before it had acquired ownership of the entire internal landline network of Britain. In that respect, the struggle by the Eastern Telegraph Group against the venture was one of strategic self-preservation. With the Pacific Cable Act in force however, the feeling of vulnerability on the part of private owners of the global network of submarine cables was understandably heightened.

The new PCB was provided with headquarters in Westminster, London, with regulations for annual reports to be made to the British Treasury and its accounts to be presented to the House of Commons. Copies would then be forwarded to the other participating members, including Canada who was assigned the task of overseeing the construction and maintenence of the new cable. In this overall undertaking, Canada was regarded as performing the role of a sub-imperialist power within the empire, but also as providing an anti-imperialist, progressive leadership function among the colonies and dominions of the empire. [Thompson 1989:9].

It is this duality of policy in Canada, embodied by Fleming, which played a decisive role in controlling the power of the Eastern Telegraph Group. It also marked the beginning of the process of diversifying away from the centre, the resources and technology for telecommunications self-management in the empire. Significantly, however, we shall see that this process did not extend to the smaller colonial territories such as those in the Caribbean, hence Cable and Wireless' continued dominance in these and other smaller colonies in the succeeding century.

5.4 - MARCONI AND WIRELESS TELEGRAPHY

Wireless telegraphy presented the second major challenge to the dominance of the Eastern Telegraph Company.In the closing decade of the Nineteenth Century, Italian scientist, Guglielmo Marconi created a system of electro-magnetic waves capable of carrying coded messages without cable over long distances. He later transferred his experiments to England, where in 1897, Marconi formed the Wireless Telegraph and Signal Company, and registered a patent for his innovation. Within three years, Marconi had generated widespread interest among private investors and governments alike in his new technology. To help protect his innovation, he renamed his company Marconi Wireless Telegraph Company Limited, and soon opened offices in Ireland, Canada, Australia and in the United States. In the face of a dominant cable-based lobby in England, it would appear that Marconi considered that the survival and propagation of his techniques required exposure both within the faster developing colonies as well as in the United States as a rising industrial giant.

But, Marconi retained his head-office in England, the seat of the colonial empire, where he could agitate for strategic decisions. Initially he presented proposals for ship to shore communication using wireless, and after some delay, the Wireless Telegraphy Act of 1905 granted a modest experimental contract with the Admiralty. Although a positive beginning for Marconi in the process of breaking the existing technological and commercial monopoly, it did not incur the sustained opposition of the vested cable interests, as they could provide no equivalent ship to shore service.

However, detailed proposals to the British government for the establishment of a wireless telegraphy network throughout the Empire was a different matter altogether. Eastern's resolute opposition and the bureaucratic obstruction of the British government to Marconi's attempt to break the then existing monopoly provides an illustration of the consequences for new entrants of an alliance between the State and the leading industry operator. Despite the advantages of his innovation, Marconi, with his Italian background and American investor connections, was regarded by the Colonial Office as an outsider. In the succeeding section we analyse the detailed exchanges of correspondence and contacts dating between 1910, when Marconi's first empire-wide application was submitted, and 1912 when a heavily modified version of his proposals, was eventually accepted.

"I have the honour to submit for your consideration the following proposals made on behalf of Marconi Wireless Telegraph Company Limited, for the establishment of a network of wireless telegraph stations throughout the British Empire, by means of which the different portions of the Empire will all be put in communication with one another at greatly reduced rates to those at present in force" [Post Office Correspondence, West India Reference Library, Jamaica, File 12450/G]. Godfrey Isaacs'letter of March 10, 1910, on behalf of Marconi, to the Colonial Office, directly addressed a major weak-point of the Eastern Group: prohibitive telegraph rates. It also immediately addressed the unfulfilled Imperial need for a truly empire-wide network for political and commercial contact.

The Marconi Company was also sensitive, however, to the requirement of British nationality and loyalty of any firm to be entrusted with the provision of this network. "We have reason to believe that we shall obtain licences, if we require them, on foreign territory,but we are a British Company and desire to see the worldwide wireless network of stations erected on British possessions at which we wish to erect stations." Among eighteen key locations identified under the proposals were main cities in India, East Africa, South Africa, Singapore, Hong Kong, Australia, New Zealand and the West Indies. It was therefore seeking licences in a direct challenge to some of the main routes operated by Eastern, on the basis that it was offering a more cohesive network which could more rapidly link England to its overseas empire.

The justifications for presenting the proposals, as outlined in the Marconi company's letter, explicitly indicate not only a new and competitive form of technology, but also an alternative financial and policy regime to that operated by the Eastern Group. "The existing rates would be cut in half and in some case still further reduced, resulting in a much greater volume of traffic... Owing to the small initial capital outlay necessary, (we) can afford to give low rates, AND WE DO NOT ASK FOR ANY SUBSIDY (their emphasis) for any portion of the system." Marconi argues further that cheap and improved communication could be expected to lead to increased trade between England and the colonies, "as well as enable many settlers to keep in touch with their relations in the mother country, which they are unable to do at present, owing to the high cable charges." The company anticipated greater knowledge and interaction among peoples in the Empire from cheaper wireless press rates.

The most decisive blow against the prevailing policy of the

Eastern competitors, however, was the proposals of a "purchase clause" under which the Company offered to sell the network and facilities to the government at the end of 20 years, to prevent "the establishment of another monopoly and ensure that the system may eventually become State-owned." The inclusion of this clause was of considerable significance to the evolution of early state ownership policy of international telecommunications networks. It opened the way for easier State acquisition of privately held network facilities, in the same way that the Pacific Cable Board pioneered the pro-active public sector role in initiating network construction.

In the shorter term, Marconi also offered further upgraded marine and naval communication at a time of increasing challenge to British traditional dominance of the high seas. Acceptance of Marconi's new scheme would ensure that "every ship in the British Navy can be in direct communication with the Admiralty.. and all ships at sea, properly equipped can receive daily news and messages throughout their voyages." An overall effect was a "substantial reduction in the government's annual telegraph bill" and a system of communication which "would be British owned, and in the event of war, would be in the complete control of the Government."

Despite the urgent, patriotic and attractive content of its letter,the Marconi Company received no reply except a polite note nine months later, in December 1910, indicating that "the matter is still under consideration" [Colonial Office to Marconi Company

December 2, 1910]. On December 28th of the same year, the Colonial Office indicated further that the matter would be discussed at the Imperial Conference of 1911, with representatives of the Dominion governments. Little further progress was reported until 1912, when Marconi's draft tender was returned, citing a number of objections and requiring a range of clarifications. These were re-submitted the following day by an increasingly exasperated but determined Marconi management. The re-submitted draft tender, however, incorporated several new concessions to the government which amounted to a private-public sector joint venture in wireless for the Empire.

According to the company's letter of February 13, 1912, Marconi would provide, install and test the "complete wireless apparatus for duplex working and fast speed automatic working masts, earth connections and duplicate power plant at each station for the sum of £60,000 per station." However at the end of a test period of six months, "the company shall hand the stations over to be worked by the Governments concerned." Marconi's on-going revenues were to come "by way of royalty 10 % of the gross receipts of the stations.." However, this arrangement would only run for 18 years, with a possible extension to a maximum of 28 years from the date of completion of the first five stations.

The agreement for on-going technology transfer to the governments of Britain and the dominions was contained in Condition 8 of the Marconi Tender: "The Company and Mr Marconi will, during the continuance of the said Agreement give to the Post Master General the right to use at the stations erected under the provisions of the said agreement all inventions, improvements and patents to which they or he are, or may become entitled, and of which they or he are or may become possessed, and over which they or he have control and power to use and which may be used by them or him and all improvements in such inventions and patents without any payments beyond those specified in the said Agreement." The all emcompassing nature of the demands being made indicates the price which was to be extracted from the new entrant.[Draft Tender Agreement, February, 1912]

The British State, through the Post Master General, was prepared to offer very little in return for this privately developed technology: "The Post Master General shall have the right to introduce into the stations at his absolute discretion any patents or inventions in wireless telegraphy in addition to or in substitution of those of the Company. The Post Master General, shall, however, seek the advice of the Company before actually introducing such Patents and Inventions. If at any time, during the term of the said Agreement, the Post Master General shall find it advantageous to use a system entirely independent of the Marconi system, and should no longer use any of the apparatus of the company in regard to which a patent is in force for the purpose of working the stations, the payment of royalty to the company shall cease."[Draft Tender Agreement, February, 1912].

Clearly, Marconi was to be an unequal partner to an inequitable agreement. The British government further demanded royalty reductions related to any reduced usage of the Marconi technology, and the right to freely "impart any information about Marconi apparatus or the mode of working it to other departments of the Imperial, Dominion or Colonial Governments.." While agreeing to indexation of royalties to usage levels, the company sought the right to technical inspection to prevent "manufacture or use without payment for any of the apparatus in regard to which information is furnished." However, the State's demand for free access to the technology by all departments of the Empire bureaucracy represented the limit of Marconi's accommodation. By letter of March 5, 1912, the Company rejected this provision in part, confining disclosure only to those "government departments, colonial governments and the government of the dominions which take part in the agreement."

The significance of this addendum was that the Company was willing to accept as party to the Agreement any colonial or dominion governments wishing to start independent collaboration with it. The British government did not maintain an objection to this clause. It knew that colonial authorities had no independent status to enter such agreements, and at the same time did not mind off-loading some financial responsibilities of royalty payments and other costs to the self-governing Dominions. But Britain ensured the inclusion of another clause which entrenched its imperial ownership of the initial network of beam wireless stations: "It will be necessary to make provision that the Post Master General's rights under the agreement, and in particular under conditions 7 and 8, shall not be affected if the company should be absorbed by or amalgamated with, some other company." [Letter from General Post Office to Marconi Company, March 5, 1912.]

We shall see, in hindsight, that this provision proved pivotal to the deepening of British government ownership of the overseas network. Whether its inclusion was a reflection of fore-sight and planning on the part of colonial policy-makers is a matter of speculation, but considerable importance was placed on its inclusion during the negotiations with Marconi.

The imperial government was by now beginning to realize that their prolonged negotiations and stringent demands were starting to produce diminishing returns, even while the need for Marconi's technology was becoming more urgent. By 1912, the threat of a First World War was beginning to emerge as a possibility, and the Dominions themselves were becoming restive. In a letter to the Treasury, [24-2-1912] A.F. King of the Post Master General's Department had estimated that the total cost of the wireless project was £1-million , and that "this should be taken in hand at once. The scheme met with the approval of the Committee of Imperial Defence, who urged that the stations should be put up at the earliest possible date." Accordingly, after some minor attempts to extract additional concessions, the General Post Office notified Marconi by letter of March 7, 1912 that the

Post Master General "accepts your tender..for the erection of the imperial chain of wireless stations.."

From 1909 when it first tendered for the entry level ship-to shore service, it had taken the Marconi Company close to 4 years to become accepted in 1912 as an operator within the Empire's telecommunications system. And even this eventual acceptance was on the basis of stringent contractual arrangements of the kind the vested cable interests were never confronted with and would never have accepted. But the Marconi Tender Agreement marked the second wave of technology transfer to the Dominions, following their establishment of the Pacific Cable Board. And it opened the way for State-takeover of privately-developed telecommunications networks within the periphery of the Empire on the basis of the need for reduced rates and hence universal service, not simply government and business access to the network.

Despite the active policy of opposition and resistance by the Eastern Group, the British government now found the prospects of the new system irresistable. Its distinct speed, cost and long distance advantages outweighed its occasional unreliability under certain conditions. Widespread interest in its advantages both by the Press, the Dominion governments and even the Pacific Cable Board led to the positive recommendation by the Imperial Conference of 1911, contributing to the acceptance that an empire-wide network of beam-wireless stations should be established on the Marconi principle. The Dominion participants may have foreseen in this innovation the basis for their future technological independence, as the network of wireless stations, unlike the Eastern multinational cable offices, were to be owned by the Dominion governments.

Those territories classified as colonies were not however to be beneficiaries of this policy of technology transfer and ownership. Where the Pacific Cable systems and beam wireless stations were introduced into colonies, such as in the Caribbean region, in Singapore and Hong Kong, the network remained under British imperial ownership and the technology under foreign control.

5.5 - CONCLUSIONS

From as early as the 1870s, the foundation companies on which Cable and Wireless was built operated with discernable multinational corporation practices, and did so in close collaboration with the British colonial government. These relationships involving the interaction between the interests of the imperial State and the commercial concerns of the multinational corporation, play an important role in the formulation of both public and corporate policy in empire telecommunications. The economic advantages of reduced overhead costs of wireless telegraphy were witheld from Britain and the empire for a protracted period because of the close and mutually protective relationship which existed between the imperial government and the cable conglomerate: Eastern Telegraph Company.

Subsequently, it was the factor of cost and the plausible advantages of the new wireless technology for both naval defence and merchant shipping which overcame both personal influence and entrenched structural relationships, in the policy-making process. But the price to the new entrant, of this shift in telecommunications policy from official cable monopoly to a dual mode, was considerable. The state demanded important controlling interests in the technology, a foothold which was to mark the start of the process of central government acquisition of the empire telecommunications system.

Eastern's monopoly grip on both the cable telegraphy and imperial state policy also created major difficulties for the collaborative efforts of the more influential colonies whose demands for the setting up of the Pacific Cable Board marked the start of a public service objective for telecommunications in the then peripheries of the empire. But like Marconi and the technology of wireless, the Pacific Cable Board helped in loosening the degree of control exercised by private monopoly capital on empire ownership and communications policy. In this respect, the Pacific Cable Board was both an alternative physical route and an alternative policy path to the development of empire telecommunications.

However, the confining of ownership participation in the scheme to the larger self-governing colonies represented an example of the controversial distinction in colonial policy between the 'Dominions' as they were called, and the black African, the Asian and the Caribbean regions which remained mere colonies. Among the reasons often advanced to explain this distinction, is that the Dominions were by then more advanced democracies and "that they were self-governing." [Foreman-Peck 10-7-90]. While it is true that many smaller colonies (which are now independent) were viewed as mere dependencies, it appears inescapable, that subjective imperial judgements determined the composition of this category of colonies. It is significant that the vast region of India, which was also internally self-governing, and which was among the early laboratories for western democracy in the east, was not among the official dominions, as South Africa and Rhodesia later became, and was not a participant in the PCB scheme.

The significance here, of the classification which was made, is that the category designated colonies, and particularly those in the Caribbean, became the least likely beneficiary, if at all, of any positive changes in imperial government policy on technology transfer, ownership or control of internal telecommunications systems before independence. As we argue in the succeeding chapter, such artificial and subjective divisions persisted in empire policy-making throughout the period leading up to the end of the Second World War and the era of political de-colonization.

CHAPTER 6

MERGER: THE MODERN BEGINNING OF CABLE AND WIRELESS PLC

By 1925, it became clear to the Dominion governments, owners of the Pacific Cable Board (PCB), that operation of the dual systems of the beam wireless and telegraph cable facilities, while providing alternative modes of communication, was far too costly. In 1928 the PCB reported a loss in revenue for that year alone of £80,000, which was directly attributable to competition from the beam wireless service operated by the Post and Telegraph Departments. In that same year, a special conference was convened in London "to examine the situation which has arisen as a result of the competition of the beam wireless with the Cable Services, to report thereupon, and to make recommendations with a view to a common policy being adopted by the various governments concerned." [Report, Imperial Wireless and Cable Conference:1928].

This conference marked a watershed in the development of empire telecommunications and in the history of both Cable and Wireless and Caribbean communications structures. In this chapter, we consider some of the events surrounding the conference, including important policy implications arising from the conference recommendations. The subsequent development of the policy process through to the start of political decolonization is also analysed.

The Imperial Wireless and Cable Conference, under the chairmanship of Britain, was attended by representatives of Australia, Canada, New Zealand, South Africa, and the 'Irish Free State'. In a break with the past, the vast colony of India was also invited to participate. But the smaller colonies, including those in the Caribbean were still not directly represented. Their spokesman was the Permanent Under-Secretary of State for the Colonies. The Canadians, who felt that the Caribbean was within their sub-imperial sphere, also took an interest in developments affecting the Caribbean region, primarily out of a sense of competition with the United States.

The convening of this conference and the nature of its terms of reference led the private sector interests in both the cable and the wireless sectors of the industry to become very concerned at the possibility of a total government takeover of the empire's telecommunications systems in the same way that the internal landline network in Britain was earlier acquired by the state.

In an attempt to forestall any such action, the two principal companies, Eastern Telegraph and the Marconi Company began negotiations for their voluntary co-operation and even merger. In March, 1928, even while the Conference was still deliberating, the companies announced that they intended to merge. The terms of the proposed merger suggested, however, that this was effectively yet another takeover by the Eastern Group. The merger arrangements envisaged the establishment of a holding company with capital of 54-million. Proceeds from this would be used to purchase all categories of Marconi shares and debentures. But only the ordinary share capital of the cable companies would be acquired, leaving their preference shares and debentures untouched. The cable company shareholders would be allocated 56.25 % of the new holding company, while Marconi's shareholders would be granted the remaining 43.75 %. Consistent with this arrangement, the cable interests would provide 12 directors to Marconi's eight [Cable and Wireless Archives: Proposed Capital Allocation in New Company 1929].

Within the Conference itself, however, the objectives were much wider than simply the preservation of the two main operating companies. Numerous submissions were received from British private sector groups like the Federation of British Industries and the London Chamber of Commerce reinforcing demands for continued private sector control of the industry. But other submissions, such as those from the Empire Press Union sought assurances of lower tariffs for press cables and improvements in both speed and reliability of messages. The Dominion governments themselves were concerned to increase their level of participation in decision-making, if not immediate ownership and control over their segment of empire telecommunication.

On July 6, 1928, after deliberations of close to six months spanning 34 meetings, the Conference announced its main conclusions: all overseas cable and wireless resources of the empire would be merged. A new holding company, to be called Cables and Wireless Limited, would be established to acquire all the ordinary shares in Eastern Telegraph Company and the Marconi Company, which would then be offered shares in the new holding company. The technical and operational tasks of providing an integrated telecommunications service for the empire would be provided by a wholly-owned subsidiary firm appropriately to be called Imperial and International Communications Limited. This operating company would assume control of the technical facilities, cables and stations of both Eastern and Marconi companies in exchange for its own shares. The cable network across the Pacific and extending in the Caribbean as part of the network of the Pacific Cable Board, would be bought for cash and the beam wireless facilities owned by the Post and Telegraph Departments would be leased for 25 years [Public Records Office, File C.O. 937/973].

In a gesture to encourage continued independent innovation, Marconi's high technology manufacturing unit, as well as the cable manufacturing company TELCON, were excluded from the merger arrangements. In this way, the engines of innovation would remain within independent private firms in England and not dispersed throughout the empire as part of the new arrangements. These exclusions, however, are likely to account, at least in part, for the absence of any manufacturing or Research and Development division within the modern Cable Wireless. The larger Dominions, however, were eventually able to gain access to technology and research from other global centres of innovation, particularly the United States where initial experimentations were already advanced on the technology of the telephone. As colonies within the empire, the smaller territories were neither allowed to secure the technology directly from their imperial centre nor from alternative sources.

6.1 - STATE CONTROL: FRACTURING CORPORATISM

A number of detailed specifications in the arrangements outlined in 1928 allow an insight into the inherent conflicts which were embodied in the communications policy envisaged for the Empire by the Imperial Wireless and Cable Conference. Contrary to the worse fears of the private companies, the Conference did not recommend a whole-scale takeover of the communications system. This could in part be attributed to the success of the merger manoeuvres and intensive lobbying by the Marconi and Eastern Companies and their private sector supporters. But if government acquisition was averted, increased government regulation and control were equally evident outcomes of the deliberations. Both the holding company Cables and Wireless and the operating firm Imperial, were to have identical boards of directors, two of whom, including the chairman, were to be approved by the British government. In this way, the central imperial government would be able to monitor and exercise greater control over the private sector investors.

Corporatist control by negotiations and the pursuit of common objectives between the state and the large private interests was beginning to break down, as the state became a more powerful partner in the relationship. The increasing assertiveness of the dominion governments in favour of a stronger role by the state succeeded in fracturing the mutual solidarity which had earlier existed between the imperial state and its capitalist elites. The imperial Wireless and Cable Conference marked a decisive turning point in the transformation of the private telegraph oligopoly from autonomous interests into a merged single agent of outright government policy. The industry was indeed in transition to becoming an acknowledge part of the official state bureaucracy.

The regulatory institution recommended by the Conference was the establishment of an Imperial Communications Advisory Committee. All matters of policy, including any tariff adjustments, had to be referred to this Committee, which consisted of representatives of the dominion governments in attendance at the meeting. While central British control was ensured by its permanent location in London under British chairmanship, this regulatory body represented the first direct forum of on-going policy direction to involve the dominion governments of the empire. And it was also intended to be an institutional restraint on the freedom of the private sector owners of the holding and operating companies, particularly in the area of tariff regulation.

Besides approving the appointment of two directors and controlling policy and cable rate increases, governments were given the right to assume direct control of all cable and wireless systems in the event of an emergency. While this was standard colonial policy being applied to the telegraph sector, it indicated the great significance which had been attached to telecommunications in terms of national security. This provision, also enhanced the reserves of ultimate control of the central government itself, which retained responsibility for security, emergencies and national defence in the dominions, colonies and protectorates.

In a provision against the threat of participation by the Americans, who had a minority stake in the Marconi Company, the Conference explicitly recommended a nationality clause within the terms and conditions of the new arrangements. It provided that control of the companies was at all times to remain British. This colonial policy had a long lineage, emerging from the days of the Navigation Acts of the Sixteenth century mercantile regimes, under which all trade by the colonies was to take place exclusively within the Empire and all shipping conducted in British ships.

The cable companies of the late Nineteenth century were subject to the same conditions, under which the British government would only provide subsidies for routes which did not intersect non-British territory. In the instance of the Twentieth century merger arrangements, it was to be guaranteed that all empire communications business would take place exclusively within British companies. But, as with the traders two centuries before, enforcement of these regulations were more easily said than done. Introduction of this condition in the Twentieth century relationships, however, did indicate the continuity and scope of elements of empire policy.

Detailed regulations were also drafted governing levels of profitability and disposal of revenues. A standard net revenue of 6 % of the capital, or a sum of 1.865 million, was designated for the operating company. This was exclusive of the non-telegraphic investment revenues. It was specified that a half of any net revenue in excess of 6 % would accrue to the company and the other half used either to reduce rates or for any other purpose approved by the Advisory Committee. These provisions were an early form of rate of return regulation, and represented an implicit acknowledgement for the first time of the entitlement of telecommunications users to benefit from industry profitability in the form of reduced rates. "The object of this provision was to prevent any exploitation of the users of public telegraph services for the benefit of shareholders." [Public Records Office File CO 937/3/4].

While there was some basis for the claim of the then Labour Party Opposition in Britain, that the government was "disposing of valuable state undertakings to private interests" [Barty-King 1979:209], the purported aim of the Conference was a reduction in the autonomy and power of the private companies and an increase in the influence of the dominion governments.It was also to set the stage for a more active role for governments in telecommunications within the British empire.

After presentation to the British Parliament, the overall recommendations of the Conference were accepted, and their implementation began under the chairmanship of Sir Basil Blackett. However, many contradictions and operational difficulties were inherent in the new arrangements. Was the new company to be a private-sector enterprise motivated by profit and responsive to the demands of shareholders, or was the company a statutory body to be operated in the wider public interest? Where necessary, should profit be sacrificed in the cause of universal service delivery, low telegraph charges and in response primarily to political and social criteria?

In addition, what was the status of the increasingly independent-minded governments in the dominions? Were they really empowered to control policy, or would they be marginalised both by the operational logic of a privately run firm, and by their remoteness from the decision-making? Assets takeover by this new company also meant a diminution of such control by the colonies and Dominions over technology as existed when they operated the Pacific Cable Board and the Marconi beam wireless stations. These and other deficiencies in the 1928 Agreement were soon to re-emerge as critical issues.

6.2 - CONFLICTS OF INTEREST

Five years into the new arrangement, in 1934, the name of the operating company was changed from Imperial and International Communications Limited to its current designation of CABLE AND

WIRELESS. The cumbersome nature of the previous name is suggested [Baglehole 1969:17] as the reason for the change. However, that decision appears to indicate much more significant developments which were taking place following the 1928 re-structuring of the industry. Several of the empire governments, among them Canada and Australia, were uncomfortable with the arrangement which placed the assets of their segment of the empire telegraph network into the day to day management of a largely private British monopoly.

The available primary data indicates the on-going nature of this dissatisfaction. The Imperial Communications Advisory Committee, in its report to the Commonwealth governments in January, 1937, provides a useful evaluation of the role of the Dominion governments and of the effectiveness of the 1929 regulatory arrangements.

> "While we have endeavoured to carry out our duties to the satisfaction of the governments which we represent, we feel bound to say that the present machinery is ineffective in relation to the really vital point, namely the framing of the Company's major policy. Our authoritative powers are rarely exercised, and when exercised, often affect only minor points on which no real issue arises....On major issues, the Company is required to consult us before adopting any scheme for extending or restricting its operations 'in so far as such scheme involves questions of general

> policy and not only questions of ordinary business and management.' In practice, this distinction is unreal in dealing with the affairs of a commercal undertaking. Policy and business and management are inextricably interwoven. We are necessarily out of touch with the ordinary run of the Company's affairs, and it almost inevitably results that important questions of policy do not come before us until a final stage when the issues are practically determined." [ICAC Report, January 21, 1937 PRO File CO 937/3/4].

What the report appears to be highlighting is the conflict of interest between the requirements of commercial enterprise for maximum flexibility in the pursuit of efficiency and profit, and the public service requirement for reduced rates, broad consultations and collective decision-making. During the period between 1928 and 1937, this bifurcation of objectives became evident, and faced with a choice, the private entrepreneurs which still controlled the merged company opted for commercial rather than public service considerations. And that was a source of considerable disquiet among the dominions. The private sector interests at Cable and Wireless had failed to realize that power had shifted decisively in the direction of the state both in Britain and throughout the empire, and that the imperial state itself was now subject to mounting pressure from both the Dominion governments and the United States.

The name of the regulatory body was a further and constantly irritating reminder of the subordination of Dominion governments to an increasingly resented imperial power. Consequently, the regulatory agency, Imperial Communications Advisory Committee, was re-designated the Commonwealth Communications Council (CCC), which suggested a more independent range of objectives. In line with this alteration and with the earlier change of name of the operating firm, the name of the holding or merger company Cables and Wireless was also changed to CABLE AND WIRELESS (HOLDINGS) Limited in 1934. However, these were cosmetic changes from the point of view of the associated Dominion governments who sought greater effective involvement in the running of Cable and Wireless and in the setting of its rates, tariffs and policies.

Among the Dominion governments' proposals in 1937 was for the appointment of seven additional directors to the company, each approved by one of the participating governments on the ICAC, which would then be disbanded. This proposals was, however, rejected. Nontheless, demands for reductions and reform in the telegraph rate structure could not be ignored and in response to the client governments' demands, a special conference was convened in 1937. This meeting agreed on a reduction in the maximum overseas telegraph rate, and a reduction in the allowable annual standard net revenue of the company from 6 % on its capital to 4 % , amounting to a maximum net revenue of 1.2 million. The effect of this was to enable a half of all revenues in excess of this now lowered level to be applied to a reduction in rates.

The 1937 Conference also approved the freehold transfer to the Company of the leased beam wireless stations owned by the U.K. Post Office. But in return, the Company was required to transfer to the United Kingdom government a shareholding interest of 2.6 million shares in the company out of existing capital of 30-million. In this way, the British government acquired its first direct involvement in the shareholding and finances of Cable and Wireless, appointing a representative of the Treasury to monitor and report on the performance of the Company. Although the 1937 conference was called at the insistence of the dominions in the hope that it would result in their greater involvement, it in fact concluded with increased direct control by the central British government. It also marked the implementation of direct British state control over Cable and Wireless.

But while this outcome to the 1937 Conference satisfied the British government's requirement for greater control over telecommunications in the wake of an impending War, it did little to meet the demands of the dominions, to say nothing of the weaker colonies, for more control over their segment of the Cable and Wireless empire-wide network. It was an issue which remained unresolved and could only at best be deferred following the outbreak of the Second World War in 1939.

6.3 - CO-OPTION INTO THE WAR EFFORT

Cable and Wireless Limited, in which the government then had a financial interest, was the single largest owner of telegraph and wireless communications globally (See Appendix 1). Both the direct involvement of the government and the extensive nature of the network were to provide the Allies with a major communications advantage at the outbreak of war in September 1939. The communications historian Charles Greaves notes that it was the active, almost statutory functions performed by the still largely privately-owned Cable and Wireless which facilitated the operation of the Allies during the war:

> "It was fortunate, therefore, for Great Britain, that Cable and Wireless owned no less than 155,000 miles of of the 350,000 miles of cables throughout the world, as well as 91 wireless circuits - later increased to 138 - which covered another 200,000 miles of the earth's surface. It was over this arterial system of Empire, through these thin red lines, that the life blood of Empire communications flowed, enabling the Allied Governments to co-ordinate their policy, strategy and supplies; newspaper and broadcasting agencies to receive the latest war news, and families at home to exchange messages with their evacuated children or their men fighting overseas." [Greaves 1947:9].

The existence of both cable and wireless technology within a single non-competitive merged company appears to have accorded a high degree of flexibility to the Allied War effort. Important messages could be interchanged between the systems to help ensure delivery. Where inclement weather rendered the wireless messages useless, cable provided an alternative, and destroyed or bugged cables could be backed up by wireless. On balance, despite its drawbacks, it appeared the wireless technology was more extensively utilised during the hostilities, not just in the naval operation, but also in the need for rapid general contact.

According to Greaves, cable ships and other communications equipment were at times deployed in military operations. On one occassion, "the Admiralty duly arranged for one of the company's cable ships to lay anti-submarine loops in the Channel, three weeks before Hitler marched into Poland. On September 3rd, 1939, the Cable ship Cambria joined in this good work." [Greaves 1947: 10]. Equally, many of the Company's installations and offices were threatened during the war. The elaborate arrangements for their security demonstrates the importance then attached by the state to the role of the company:

> "Although Cable and Wireless ran some 200 overseas bases, there were just five in England...All were linked to the Central Telegraph Exchange, but secret conduits had been laid so that Electra House, Cable and Wireless' specially strengthened headquarters in London on the Victoria Embankment, could take over operations in the event of Moorgate, which in effect was the centre of the Empire, being knocked out by sabotage or air raid. Supposedly bomb- and gas-proof Electra House also accommodated a staff of 100 cable

> censors and the Foreign Office's Political Intelligence Department (which subsequently became the Political Warfare Executive)." [Nigel West 1986:142].

In effect, the government had operationalised its provision for take-over of the company in time of war, although it did not do so formally. The state had co-opted the services of the Company into the War effort, a measure which was effectively a prelude to outright government take-over. But at the time, the absence of formal takeover could be mistaken for a vote of confidence in private sector ownership: "It was the greatest compliment ever paid to private sector enterprise that, when Britain finally declared war on Germany, the company was allowed to function without government interference", wrote Greaves in 1947. Ironically, he himself noted in the same paragraph that along with the telegraph cable service, "All the other facilities of the company, too, were immediately placed at the services of the Empire in September 1939." [Greaves 1947:10].

While some company input was voluntary and patriotic, the company's involvement took place in an overall regime of scarcely disguised state hegemony over the affairs of the company.

> "Since 1928, Cable and Wireless had appeared to enjoy an independent existence... In reality, Cable and Wireless was another clandestine method of acquiring raw intelligence for GCHQ (the British intelligence gathering and electronic evesdropping agency-HD). The

Official Secrets Act of 1920 had required all cable operators to supply copies of their traffic to the British government, and all this material had been delivered to Room 47 of the Foreign Office for ..scrutiny". [Nigel West 1986: 141].

The sentiment that there was no government interference was far removed from the reality. The then secret minutes of the War Cabinet discloses the existence of the Official Committee on Empire Telecommunications Services, which both articulated the telecommunications requirements of the War as well as provided policy guidance on possible post-war structures and relationships [Public Records Office File CO 937/3/4, November 1944]. In addition, Cable and Wireless itself was under the control of Government-appointed Chairman, Edward Wilshaw, and so no additional formalities of control may have been deemed necessary.

During the 1939-1945 War, therefore, even though Cable and Wireless was still nominally a privately-owned company, its British nationality and legal responsibilities to the British state were exploited extensively. The Company virtually became a department of the War Cabinet, although its commercial revenues during the war soared as a result of these special duties and increased official traffic. Once again, the immediate political and military interest of the state interacted with the financial and commercial goals of private industry in the defence of empire. But by now, this was occurring less in a corporatist framework and more on the basis of the overpowering influence of the imperial state.

Nevertheless, many of the Dominion governments were acutely aware of the role being performed by Cable and Wireless, and were therefore not unmindful of the importance to their own national security of a domestically-owned, national telecommunications agency. The resulting demands of the Dominion governments later played an important part in determining the future of the empire communications network and of Cable and Wireless itself. For one thing, the company's functions began to be regarded as too important to be entrusted to the primarily financial motivations of a privately owned corporation. Within Britain itself, domestic public opinion was moving in favour of the view that telecommunications and other services could be more cheaply and efficiently delivered through state ownership.

6.4 - NATIONALIZATION

Soon after the end of the War, the Labour Party government of Clement Atlee came to power in Britain on a manifesto of extensive nationalization. Government take-over of inland transport, coal, gas, electricity, the Bank of England, the iron and steel industries were all specifically targetted in a public sector led programme of re-construction and development in Britain. Among the justifications offered in the 'Declaration of Labour Policy for the Consideration of the Nation', were arguments that "amalgamations under public ownership will bring great economies in operation and make it possible to modernise production methods and to raise safety standards.." It was further argued that "public ownership..will lower charges, prevent competitive waste, open the way for co-ordinated research and development.." [Chester:1975:1].

Although the overseas telecommunications system was not a specified sector in the party's pre-election manifesto, the Labour government regarded its landslide election victory as a mandate for the principle of nationalization. Many of its arguments could also be applied to the ownership and structure of the national and empire telecommunications system. But what may have been the decisive factor was the realization that its policy thrust was consistent with the thinking and deliberations of the Commonwealth Communications Council (CCC), whose membership was made up of representatives of the dominion governments, Britain and a single representative,(named by Britain) of the numerous other colonies in the Empire. Even before the end of the War or the change of government, the CCC had submitted to the specialised War Cabinet committee a number of recommendations for a thorough re-structuring of empire telecommunications, and by implication, of Cable and Wireless itself. Among the recommendations, dated May 10, 1944, were the following proposals.

> "(a)A Government-owned public utility corporation should be established in the United Kingdom to acquire Cable and Wireless (Holdings) Ltd. The United Kingdom, the

Dominions and India would be expected to bear their full share of the responsibility for the maintenance of the cables by the United Kingdom Corporation. (b) The establishment of the United Kingdom Cable and Wireless Corporation, should be followed as soon as can be conveniently arranged having regard to local conditions, by the establishment in the Dominions and India of similar Government-owned public utility corporations to take over from the various authorities at present administering them, the external telecommunications services in their respective territories" [ETS (44) 12, PRO File CO 937/3/4, 1944].

Cable and Wireless vigorously opposed this proposal from the dominions of Australia, New Zealand, South Africa, Canada and the colony of India. It meant the break-up of the Company as an operating entity in the major empire territories, although other aspects of the ANZAC proposals envisaged a continued minority (25%) shareholding in the new dominion corporations by the reformed U.K.-based 'parent' company, which would offer to each a 5 % participation in its own stock. But this very U.K.-based 'parent' firm was to be government-owned under the ANZAC scheme, leaving the private sector interests in Cable and Wireless once again greatly alarmed about their future.

As an alternative, Cable and Wireless proposed the establishment of a privately run single Empire-wide corporation, with the government in each territory guaranteeing a fixed interest (3 %) on the equity of shareholders. The company would be run by a multinational Board of Governors, appointed by the British sovereign on the recommendation of the governments of the dominions and India and the Secretary of State for the Colonies. The Board, however, would operate out of headquarters in London. There, it would supervise an operational Management Board consisting of a Director General and five or six Regional Directors with geographically-based management jurisdictions.

Under this plan, the company proposed that government control would be exercised through exclusive licences, in the case of the dominions and by way of the terms of the Charter in the case of central Imperial control. The proposal envisaged an empire-wide monopoly by this corporation, including control of the emerging telephony networks, as well as possibly the manufacturing and ship-to-shore communications companies [Single Empire Scheme: Proposals of Cable and Wireless, C&W Archives; PRO File CO 937/3].

By the time the Labour Government came to consider Cable and Wireless within its overall policy of nationalization in 1945, the arguments were already extensively canvassed within the industry with positions hardening on either side: outright nationalization, or re-structured private-ownership including increased Imperial and Dominion government involvement. In 1944, the Official Committee on Empire Telecommunications, in its First Report, identified the 'Essential Requirements' of a future system of empire telecommunications. These included "Unity of Policy and Control", "Local Autonomy" and "Sharing of

Responsibilities".

On the basis of these policy criteria, and after consideration of the merits of the two schemes, the Committee recommended that the Cable and Wireless single empire corporation was "far superior to the scheme recommended by the CCC, and we are satisfied that the advantages of the single Empire Corporation are so great that every effort should be made to secure the consent of the dominions and India to the adoption of this basis in principle." [Part 4, Official Report, PRO File CO 937/3].

6.5 - AUTONOMY TO THE DOMINIONS

In practice, the Dominion governments themselves were to have the last word on the matter, however, and the new government convened a Commonwealth Communications Conference in London in July 1945, under the chairmanship of Lord Reith. Delegates at this Conference rejected the single Empire scheme of Cable and Wireless, demanding instead separate organizations in each dominion territory. The meeting felt that the form of the organization adopted, either a publicly-subscribed company or a wholly government-owned corporation, should be uniform in order to facilitate anticipated common transactions. Where a common type of company was not practicable, the meeting suggested that the telecommunications functions should be taken over by a recognizable government department [Chester 1975: 453].

A major sub-theme of the 1945 Conference was the future relationship between the British empire telecommunications network and commercial and government interests of the United States of America. During the pre-war era leading up to the convening of the conference, the U.S. made active representations for direct commercial wireless circuits to British colonies and dominions. These were consistently rejected, together with an American request for a commercial wireless station in England itself. While the central British government was concerned about the threat of American competition, the Americans argued that excessively high rates were being charged and routes unfairly protected by the British government in order to bolster the revenues of the Cable and Wireless state monopoly [Barty-King 1979: 286].

6.6 - MEETING U.S. DEMANDS

Following the intervention of the United States into the War on the side of the allies, the British government agreed to the direct wireless circuits, despite the objections raised by Cable and Wireless. Clearly, in 1942, in the middle of the War, military considerations predominated over sectoral commercial interests. But these wartime decisions on telecommunications were to make a profound contribution to loosening the stranglehold of Cable and Wireless on empire telecommunications. The decision by the post-war 1945 Telecommunications Conference not only endorsed as permanent the United States wireless circuits in the empire, but also went some way to meeting the American demands for an end to imperial state monopoly on international telephone and telegraph services across the vast British empire [Report, Commonwealth Telecommunications Conference, Chapter D, pp 16-23, PRO File CO 937/3/2].

Despite strong press criticisms, some possibly orchestrated by the Cable and Wireless lobby, the government accepted the main conclusions of this Conference. In a letter to the Secretary of Cable and Wireless Limited in October, 1945, the Chancellor of the Exchequer informed the company that "the United Kingdom Government has accepted the recommendations in the (Conference) Report. This involves a change to public ownership of the Commonwealth telecommunications services". The method for implementing the decision was set out in the Chancellor's letter: "the simplest method of effecting the change of ownership would be for the government to acquire those shares of Cable and Wireless Limited which they do not already hold." [E 48047/9/3 Oct.6, 1945, File CO 937/3/2 PRO].

Synopsis

Between 1928 and 1945, three successive deliberations were convened on the future of the empire telecommunications network. From a comfortable corporatist relationship between the telegraph industry and the British government, the situation was transformed to one of increasing state control. Power over decision-making and over the structure of the industry was less on the basis of negotiations and more in terms of government directives and eventually outright ownership. But instead of being shared with the private industrialists, state power was progressively being shared with the emerging dominion governments, who were concerned about an exclusively British monopoly of either a private or imperial character.

The exigencies of war provided a significant opportunity to practice this strengthened state role, as well as to respond to the demands of a wider world order. The emergent United States of America succeeded in this period, to gain important wireless circuit access to the hitherto closed telecommunications markets of the empire, thereby strengthening the demands of the dominion governments for greater self-determination in telecommunications policy. By the end of the war in 1945, the Cable and Wireless monopoly on empire telecommunications had been irrevocably lost, and both the dominions and the United States enjoyed greater freedom and interchange in telecommunications development. But the telecommunications systems of the smaller colonies remained within the restrictive fold of a contracted imperial network, from which many of the Caribbean territories have still not escaped.

In denouncing the decisions of the 1945 Conference, the Scotsman newspaper of November 5, 1945, complained of the secrecy of the deliberations. Irrespective of its views on the details of conference outcome, the paper was expressing a legitimate concern about the secret manner in which major public policy decisions were being taken. The same secret approach had been adopted in

1928 and 1937. In each of those previous cases allowance was made only for written submissions considered at meetings which "were private and their proceedings confidential". This approach allowed the wider public opinion in Britain to be moulded and led by the lobbying and campaigning articles of mainly the private vested interests. This was in line with the previously prevailing corporatist ethos of limitations on the direct involement of representative institutions, such as Parliament, and on public debate, while issues were being decided.

The Times newspaper, for it part, while giving support to the company's letter to stockholders deploring the decision, discreetly pointed out that "this view clearly commands respect, though as the United Kingdom have accepted the proposals, it may not alter much in practice." [Times, Nov. 2, 1945]. In this instance, as in others, the decision-making process preceded, even pre-empted, public debate. The Scotsman, while acknowledging the difficulties and contradictions in the implementation of the 1929 re-stucturing, was editorially forthright in its praise of the company's position: "It has in fact combined very happily the duties of a public service with the efficiency and enterprise of private enterprise. Now, in place of the co-ordinated system which it has built up despite great difficulties, there is to be a de-centralised system, which will bring with it all sorts of fresh problems." [Editorial, Scotsman, Nov 4, 1945]. But such public comments were being offered after the event, with no effective bearing on policy decision-making.

Nonetheless, after 1945, the larger territories of the British empire secured their right to establish their own institutions for external telecommunications. In these areas, Cable and Wireless was retained in a temporary advisory capacity, but the period marked the end of the company's role as an empire-wide telecommunications owner and operator. In all the dominion territories, public utility corporations were established to succeed Cable and Wireless.

In keeping with other recommendations of the Commonwealth Telecommunications Conference, a Commonwealth Telecommunications Board was also established, with Britain, India and each Dominion territory represented. The Board would provide a collaborative framework for the new entities, including administration of a special accounting arrangement,(known as the first wayleave scheme) for settling charges and mutual transactions. Until their independence, the smaller territories enjoyed no automatic right of participation in these arrangements, and thus were once again left to the benevolence of the British Colonial Office.

The Telecommunications Board has since been re-constituted into the current Commonwealth Telecommunications Organization, consisting of an Executive Council, and Secretariat known as the Bureau, all still based in London.

6.7 - C&W: ENFORCED RE-STRUCTURING

In 1945, two aspects of the re-structuring remained to be resolved. The first was the form to be taken by the British government's own external telecommunications entity, and the second was a decision on how the telecommunications needs of the remaining colonies were to be provided. In the eyes of many colonial administrators this was one and the same problem. A memorandum from the Colonial Office to the War Cabinet's Official Telecommunications Committee made this clear:

> "[A]lthough there had been no opportunity for consulting colonial governments in regard to the Council's proposals, the view of the Colonial Office was that it would, in general be desirable for the overseas point-to-point wireless telegraphy services and the overseas wireless telephony services to be taken over by the United Kingdom Corporation. It is felt that in the majority of cases, the Colonial governments concerned would welcome the operation of these services by the United Kingdom Corporation..." [Item ETS (0) 44, PRO File 937/3/4, Aug. 2, 1944].

The absence of consultations with the colonies stood in stark contrast with the assertiveness and initiatives of the larger dominions in successive conferences and deliberations. As in the pre-war period, when political and even ethnic kinship may have determined a priority role for the large white 'dominions', a weakened post-war Britain was even more inclined to co-operate with dominions whose economic potential now placed them in the frontline of the emerging de-colonization process. On the other hand, the aspirations of the smaller, economically weaker, and more easily dominated 'colonies' were viewed with scant regard.

Their eventual independence was scarcely envisaged, and their role was consigned mainly to their strategic importance as indefinite appendages of Britain. "No specific mention of the colonies is made in the first Interim Report of the Commonwealth Communications Council, but it seems clear from paragraph 36 (ix) of the Report that it is the intention that the United Kingdom Corporation shall be responsible, as a strategic requirement, for the upkeep of the cables to and between the Colonies." [Colonial Office draft memorandum item 22905/1/44, PRO File CO 937/3/4, July, 1944]. It is apparent at this stage that the future of the telegraphic cable system, the embrionic telephone network and the beam wireless systems in the colonies were to be resolved in line with mainland British 'strategic requirements'.

In determining the form that Britain's own external telecommunications agency should take after the break-up and nationalization of Cable and Wireless, the preponderant view within the bureaucracy was that, as with the dominions, a new state-run public utility corporation would be established. As we have seen, this scenario also envisaged that this corporation would take charge of the network in the colonies. "The changes in the Colonies will, I think, have to take place concurrently with the changes in the United Kingdom, since the establishments in the Colonies will become the responsibility of the United Kingdom Corporation." [Memorandum from Colonial Office to Official

Committee on Telecommunications Services, item 22905/44, July 14, 1944]. However, the government's decision and actions which followed, departed significantly from this scenario.

Well before the decision was made, Cable and Wireless had re-doubled its lobbying efforts for a continued role in empire telecommunications. By September 1944, in its long memorandum of self-defence, Cable and Wireless was already pointing out the lack of consideration given by the Commonwealth Communications Committee to the needs of the colonies, "which seem to have been neglected in this and other respects by the C.C.C. in its Report." [ETS (O) (44) 11, September 20, 1944].

After considerable deliberation and delay, it was decided that responsibility for U.K. external telecommunications would be assigned to the Post Office, which already operated Britain's internal service. Despite disadvantages such as a removal of inter-service competition,(for example between the telegraph and air mail) and the lack of a profit motive, the government assessed that the advantages were more significant. These included economies in common administration, including joint research and development costs and savings from the elimination of competition.

As it turned out, the need for more effective intelligence gathering on an empire-wide basis was also an important consideration in centralizing telecommunications services within the General Post Office, which was an important part of British intelligence network. Accordingly, under the Commonwealth Telegraph Act of 1949, the U.K. assets of Cable and Wireless were transferred to the Post Office, which assumed overall charge of both external and internal telecommunications for Britain. The only remaining major unresolved issue was what was to be done with the disparate group of small colonies.

6.8 - FATE OF THE SMALLER COLONIES

Some colonial governments themselves were, by then, beginning to make their own muted demands for a measure of self-determination, which received acknowledgement in a Colonial Office Draft memorandum in July 1944:

> "There is no doubt that certain colonial governments would be capable of running some of their external wireless communications. For instance the Hong Kong government used to operate highly remunerative overseas wireless services, but as these services were generally in direct competition with the cable services operated by Cable and Wireless Limited, the Colonial government agreed under pressure from the Secretary of State to hand over the external fixed station commercial radio communications to Cable and Wireless Limited." [Item 22905/1/44, July 1944].

Within the Caribbean area itself, as well as elsewhere in Asia, small countries had acquired sufficient command of the existing technology and were demanding, like the dominions, the right to run these services themselves. In the same correspondence, it was noted that:

> "Certain other colonial governments, e.g. Ceylon and Bermuda would no doubt be capable of handling their own overseas wireless traffic and the Bermuda House of Assembly has in fact already made tentative enquiries as to the possibilities of the Bermuda government taking over the Bermuda wireless station when the present licence of Cable and Wireless Limited expires in 1946. But if it were decided that on strategic or other grounds the cables to the colonies in question should continue to be maintained and operated, such wireless services would be in direct competition with the cables. Moreover, it would seem to be impossible for any colonial government to establish adequate world coverage without at some stage transferring the message either to some foreign communications company or to the system operated by the new (Dominion) Corporations." [Item 22905/1/44, July 1944].

Against this background, it was not surprising, that the representations by some of the colonies to run their own external services were discounted by the British colonial authorities. Again, a combination of economic and political motives governed colonial policy. In economic terms, the British parent state was acting in protection of its now state-run transnational company, as well as in protection of imperial security and strategic requirement. The strategic interest was advanced even more to the fore when the same Colonial Office memorandum contemplated the cases of Jamaica and Barbados:

> "Further it should be borne in mind that the wireless stations now operated by Cable and Wireless Limited in certain colonies form an important link in other empire wireless telegraphy services, e.g. the Cable and Wireless station at Barbados serves as a relay station for the circuit between the United Kingdom and Australia , and the Cable and Wireless station at Jamaica forms a link in the overseas communications for British Honduras and the Bahamas."

In consequence of these interlinked empire interests, the operation of the communications of the colonies was unlikely to be assigned to the colonies themselves where possible. At the same time, the Post Office, which was to be charged with the task of operating the U.K. based external services, proved an unsuitable entity in which to vest control of the colonial network. Protracted Cable and Wireless lobbying was about to pay off. In the eyes of the imperial policy-makers, the next best alternative was a retention of the now State-owned Cable and Wireless to operate this residue of small but 'strategic' colonial network. Support for this option was already being expressed in 1944 by the lead officer in the Colonial Office, J.Megson:

"Generally, I think that Cable and Wireless Limited are in a better position to conduct the overseas radio telephone services of the colonies than the colonial governments. In many cases, particularly in the West Indies, Cable and Wireless Limited already have the equipment there to start such services, and I do not think that in the smaller colonies, colonial governments have the operating staff or the technicians to conduct such services. I think that there would be some advantage in having all the staff operating radio telephone services, wireless services etc. in the West Indies under one body, so that the staff are interchangeable and visits by superintending officials can easily be arranged.." [Memo of J. Megson on 'Aspects to be Considered by the Official Committee', July 14, 1944, PRO File CO 937 /3/4].

It was this line which prevailed, and Cable and Wireless was granted the responsibility to operate the telecommunications system of the smaller colonies of the empire, even while the company was being denied a role in Britain itself or in the more developed dominions.

6.9 - CONCLUSIONS

It is against this overall background that Cable and Wireless developed. From classical private sector beginnings linked to a corporatist relationship with the state, to strong state hegemony and eventually nationalization which lasted for over three decades. Through its historical evolution, the company benefitted from the consistent support of a parent state for which control over communication was essential to the geo-politics of a colonial empire. Cable and Wireless, the company providing these vital links, managed to survive three major policy review conferences in 1928, 1937 and 1945, and many other challenges including route and technology competition, state ownership and war before then. Throughout all these challenges, the process of policy-making by the state was marked by a consistent absence of public involvement and a lack of consultation on policies affecting the smaller colonies which lacked the economic leverage of the larger dominions.

Unlike many other telecommunications MNCs, C&W inherited a global network, even if on a reduced remit, following loss of its home market and larger overseas client base. However, it returned the support and loyalty of the British state by remaining very much a British company. State-ownership and British nationality ensured that it did not pursue a geocentric strategy, as might be expected. Instead, its operations within the British colonial empire and eventually outside of it, were conducted on the basis of an ethnocentric approach, oriented towards its home country. This strategy is evidenced by its profit remittances, sustained British nationality and ownership and eventually its re-entry via Mercury into the national home market to which it had always aspired.

The nationalization of the company's holdings in the larger ex-colonial territories of Canada, Australia, New Zealand, India, South Africa, Ireland and Southern Rhodesia, meant that the development of the company over the last forty five years relied on its retention of remaining British colonies, such as Hong Kong and parts of the Caribbean, as well as other small colonial states which continued to provide a base for the company. Unlike the options offered to the dominions, the colonial territories to which Cable and Wireless remained attached were neither consulted nor given a choice of operating their own telecommunications systems. Indeed, as we have seen, even colonies which were willing and able to take-over their networks, such as Hong Kong, Bermuda and possibly Jamaica and Barbados, were denied this role by the colonial authorities in favour of strategic advantages to Britain of a continued Cable and Wireless ownership and management.

In analysing the distinction which was maintained by the Centre between the colonies and the dominions, Amin argues that "all the regions that were integrated in the world capitalist system with peripheral status have remained like that to the present." He goes even furthur in arguing that the large white dominions were hardly even members of the periphery at all. He uses as his criterion the character of the state, with centre formation having state systems capable of facilitating 'autocentric capital accumulation' while peripheral states are structurally incapable of this and instead facilitate local penetration by external forces of worldwide accumulation. "We make clear that according to this thesis, New England, Canada, Australia and New Zealand were never peripheral formations; by contrast Latin America, the Caribbean, Africa and Asia - with the exception of Japan - were and have remained so." [Amin 1990: 169-170].

In this respect, British imperialism can be regarded as operating at two distinct levels with regard to its telecommunications policy of the late nineteenth and early twentieth centuries. Its first priority was responding to the demands of the dominions as a means of retaining its influence over their tendencies towards independent policies. At a second level, the interests of the colonies were either not considered or regarded as relatively unimportant. The position of these colonies, which include those in the Caribbean, was that of a periphery one stage removed from the dominions on the fringes of empire.

It is within this historical context that Caribbean governments and other interest groups have to formulate modern policy. C&W's existence was entirely premised on the patronage of the parent state and on the latter's power and influence in maintaining colonial relationships. By the 1960's when a second wave of decolonization exposed Britain's political inability to sustain this influence, the company once again entered into a period of crisis, which was only really resolved in 1981 with the British programme of renewed privatization under the policies of the former Conservative Prime Minister, Margaret Thatcher.

By then, the reserve of experience accumulated by Cable and Wireless in negotiating with governments from both home and host countries and the extent of its knowledge of the Caribbean region had spanned close to a century and a quarter of MNC operation. In contrast to this, many of the current host governments in the region have had less than three decades of experience in direct, independent interaction with the company, whose corporate size had also grown to well in excess of the national budget of some of these regional domestic economies.

In the succceeding chapter, we examine the power and global scope of Cable and Wireless PLC, as a modern, private multinational corporation. Although owing it global reach to historical factors of empire, the company now operates fully as a capital accumulating enterprise, uninhibited by the direct political considerations of a state company or the mixed motives of its earlier corporatist forebears. But the image of the company as part of the beneficial colonial heritage of British imperialism persists, and is even cultivated by corporate image makers unwilling to dispense with important firm specific and location specific advantages built up over generations.

CHAPTER 7

CABLE AND WIRELESS - THE MODERN MNC

Cable and Wireless was among the earliest group of British state-owned enterprises to be privatised by the Conservative government of Prime Minister Margaret Thatcher. Since its return to private sector operation in 1981, the company has undergone significant re-structuring, and re-definition of its corporate objectives and strategies. The period since then has been marked by an unbroken record of profitability and expansion, including the acquisition and launch of Mercury as the sole national network competitor to British Telecom in the United Kingdom telecommunications sector.

But is the company's pattern of growth uniform across its global span of regions? How does its current corporate strategy benefit from its historical associations and what are its new corporate strategic targets? In this chapter we profile the modern multinational corporation into which Cable and Wireless has grown since privatization. Our examination of its modern scale and scope provides a useful perspective on the new negotiating partner across the table from national telecommunications policy-makers in the small and indebted states of the Caribbean.

7.1 - COMPARATIVE SIZE OF C&W

Global profitability and levels of overseas investment have been incorporated by Penrose in her discussion of decision-making in multinational corporations. She notes that the most obvious measurements of the scope of a firm are to be found in the annual operating and financial statements [Penrose 1968: 28-29]. On that basis, Cable and Wireless, according to the Financial Times Business Information Unit, ranks among the top 100 U.K. firms [FTBI 1988: 98].

This grouping, however, includes a very wide band of firms. It is therefore useful, in order to appreciate the relative size of Cable and Wireless to make a limited comparison, with two other similar British firms. We will use British Telecom which is similar in basic function to Cable and Wireless (and formerly a part of it) and is one of its current major competitors with an interest in the Caribbean. Secondly, we will use Reuters Holdings Limited, which developed in a similar historical pattern to Cable and Wireless. For example, where an antecedent company to Cable and Wireless was instrumental in establishing the first permanent trans-atlantic telegraph link in 1866, Reuters was amongst the first corporate users of it. Both companies have benefitted from a close association with the implementation of British government colonial policies.All three firms currently have extensive global business interests within the international service sector. Some comparative financial indicators are set out in Table 6.

In 1987-1988, the market capitalization of Cable and Wireless was nearly twice that of Reuters, but only about a quarter that of British Telecom. Cable and Wireless, a more labour intensive operation, employs three times the number of Reuters' employees, yet appears miniscule in comparison to the staffing, turnover and profitability levels of British Telecom.

The U.K. Companies Act, 1989, [Section 13 (1)] provides three criteria by which a company is adjudged to be a small or a medium sized firm. The differentiation between these two categories and that of a large firm is important because companies qualifying as small or as medium sized firms,(as against those classified as large corporations) are exempted from certain requirements of the Companies Act, although as we shall see, large companies falling outside these two categories, can also benefit from certain other exemptions. [Holmes and Sugden 1989:1]. In terms of the small and medium-sized criteria, classification is on the basis of firms meeting any two of the three standards set out in Table 7.

On the basis of the Companies Act criteria at Table 7 and the comparative statistics at Table 6 it is clear that C&W ranks as a large multinational service firm. While being considerably smaller than the main United Kingdom national carrier British Telecom (B.T.), it is larger than Reuters and considerably exceeds the official British criteria for a small or medium-sized company.

TABLE 6

SELECTED COMPARATIVE INDICATORS: REUTERS, C&W, B.T.

1987-1988 (£)

Firm	Capital	Turnover	Pre-tax profit	Staff
Reuters	1.902 bn.	1,003 mn.	215.4 mn.	10,064
C & W	3.376 bn.	1,244 mn.	356.0 mn.	30,000
B. T.	13.287 bn.	9.424 mn.	2.067 bn.	234,400

Sources : Compiled from Annual Reports of Reuters, C&W, and British Telecom 1987-88

TABLE 7

CRITERIA FOR DETERMINING FIRM SIZE (£)

INDICES		SMALL FIRM	MEDIUM-SIZED FIRM
Turnover not exceeding	-	2m	8m
Bal. Sheet Total below	-	0.975m.	3.9m.
No. of employees below	-	50	250

Source: Companies Act 1989 Section 13 (1).

7.2 - FINANCIAL PERFORMANCE

In financial year 1988-1989, The Cable and Wireless Group of Companies recorded pre-tax profits of£420-million, an increase of 18% on the previous year's level of£356-million. In 1989, the company had net assets of £1,555.5-million and a turnover of 1,534-million. By turnover is meant the gross amount accruing to the group from all sources of income within the financial year. An examination of these accruals can give an insight into the main sources of income for the company, while providing an indication of its core corporate activities.

Table 8 indicates that the company's main income-generating activity is the provision of public telecommunications. This includes the provision of international telephone services, facsimile and data transmission facilities, domestic telephone services and other telecommunications-related sources such as leased circuits, management fees and maritime communications services. Within this grouping of corporate activities, it is significant to note that international telephone services represented well over half of the firm's telecoms turnover. This reflects both the greater profitability of international telephone services over domestic services, and the company's own traditional emphasis on the international aspect of telecommunications operations. In 1989, it was providing external telecommunications for 35 countries and internal telecommunications for 22.[C&W Directors Report 1989:41].

TABLE 8

CABLE AND WIRELESS PLC
TURNOVER - 1988 & 1989(£m)

ACTIVITY	TURNOVER	
(PUBLIC TELECOMMUNICATIONS)	1988	1989
International Telephone Services	562.4	700.5
Domestic Telephone Services	254.5	324.5
Other Telecommunications Services	267.1	285.2
SUB-TOTAL	1244.1	1310.2
(OTHER ACCRUALS)		
Equipment Sales and Rentals	94.5	160.2
Cableships and Contracts	65.6	63.7
TOTAL (m)	1244.1	1534.1

Sources : Compiled from Cable and Wireless Annual Reports 1988, 1989

Other categories comprising turnover are equipment sales and and rentals, cable ship revenues, contracts and consultancy fees. The company's non-franchise equipment transactions involve the maintenance of terminals and communications systems. Particularly since its acquisition of the U.K. firm Telephone Rentals in 1988, the Group has also been engaged in the sale, lease and rental of equipment, reflected in significant growth in this non-core area.

Cableship turnover derives from the commercal chartering of the firm's 9 cable ships and 2 submersibles to other cable owners and manufacturers. And the 'contracts' sub-category brings in revenues from consultancy fees and other short term contracts. As Table 9 also indicates, this category: equipment sales, cable ships and contracts, while recording a modest increase over the previous year, still remained a minor income area for the firm in 1989. However this area, particularly equipment sales and rental, is a prospective important growth sector for the group in such areas as personal communications networks (PCNs) and mobile telephone networks like the group's Callpoint service, operated by subsidiary Mercury.

Overall C&W turnover in 1989 increased by £290-million on the previous year, with the greatest single contribution being made by it's international telephone services. As Table 9 indicates, this area grew by £138-million compared to an increase of 70-million in the domestic telephone services category. The statistics confirm Cable and Wireless' core activities to be in the provision of (1)international and (2)domestic telecommunications services in conditions of both profitability and growth.

As we noted earlier, however, annual company reports while being the most accessible source of data on financial performance, often obscure as much about the company as they reveal. While we know from these reports that Cable and Wireless is operating in conditions of sustained profitability, more detailed analysis of the company's performance is inhibited by the absence from its annual reports of the parent firm's profit and loss account. The legal basis for this is the U.K. Companies Acts of 1985 and 1989. The latter,according to Holmes and Sugden, provides that the parent company's Profit and Loss account may be omitted from the consolidated accounts provided the parent company's balance sheet shows the parent company's profit or loss for the year.[Holmes and Sugden 1989: 120]. Because the balance sheet spells out less and condenses more of the operating details of the firm, some companies opt to provide only this minimum degree of information. "..In practice, one seldom, if ever, sees the parent company's own profit and loss accounts." [Holmes and Sugden 1989: 120].

Accordingly, Cable and Wireless' 1989 Annual Report notes that "The company has taken advantage of the exemption contained in the Company's Act 1985 from presenting its own profit and loss account." While this policy may be convenient for the firm in terms of limiting the access of competitors to information, it does conceal from public analysis specific areas such as loss

TABLE 9

CABLE AND WIRELESS PLC
SELECTED FINANCIAL PERFORMANCE INDICATORS (£m)
1981-1989

Year	Turnover	Pre-tax Profit	Net profit	% Return*
1981	294.9	64.1	40.6	
1982	359.4	89.2	45.0	
1983	418.4	156.7	97.7	
1984	673.1	190.1	112.8	23.6 %
1985	861.5	245.2	143.7	26.7 %
1986	907.0	295.0	179.5	23.6 %
1987	912.9	340.5	215.4	23.4 %
1988	1,244.0	356.1	261.0	23.8 %
1989	1,534.0	420.0	414.0	24.5 %

Sources : Cable and Wireless Annual Reports 1981 - 1989.
*Return = Return on average net assets after tax.

making activities, a detailed break-down of staff costs and investment costs by subsidiaries, as well as taxes paid or liable to specific host countries.

Notwithstanding the limitation of information on Cable and Wireless' profit and loss account, there is enough data to show that the company's 1989 pre-tax profit increased by £64-million, and its trading profits increased by some £80-million or by 28% over the previous year. This performance marked the eighth successive year of profit growth since the company was privatised in 1981. Table 10 provides some selected indicators of the company's performance over these years. It has been characterised by accelerating growth. According to Sir Eric Sharpe, the company's retiring Chairman, the pre-tax profit of Cable and Wireless PLC grew at a compound rate in excess of 24 % per annum over the period since 1981.

7.3 - PERFORMANCE BY REGIONS AND SUBSIDIARIES

In the case of its Caribbean and other subsidiaries, the company does not publish individual performance figures. Instead, the out-turn is incorporated within regional statistics, making it difficult to disaggregate individual subsidiary performance. The British Companies Act [1989: Section 5], requires the presentation of only parent company accounts and the overall group accounts. Consistent with this minimum statutory requirement, Cable and Wireless' accounts "comprise a consolidation of the accounts of the Company and all its subsidiaries together with the Group's share of the results and net assets of its associated companies."[Annual Report 1989:49].

However, since the subsidiaries are often also registered companies within the United Kingdom home base, Cable and Wireless is obliged by law to lodge details of the annual performance of each subsidiary with the U.K. Registrar of Companies. While recourse to delayed submission is available to the company, information on subsidiaries, when completely submitted, should include annual performance summaries, copies of Memorandum and Articles of Association, share capitalization and details of directors and secretaries. On the basis of these sources, we can gain a closer insight, later into the operations of the Caribbean subsidiary Cable and Wireless (West Indies) Limited. However, performance details on Cable and Wireless (W.I.) Limited are themselves consolidated results for the parent company's multiple Caribbean undertakings, and therefore will not provide data for meaningful Caribbean country by country analysis. These Companies House data are nontheless useful in examining overall Caribbean investment policies and performance, and will be considered later, together with annual reports of the associated companies registered in the Caribbean itself.

In terms of contribution to overall corporate profitability, Cable and Wireless' own group structure is based on a wide geographical classification, in 'regions'. In this respect it falls within Brooke's Type B company category, where geographical organization is the main link with an expansionary foreign operation.[1970:25]. Cable and Wireless regions are : Asia and Pacific; Middle East, Indian Ocean and Africa; Western Hemisphere and United Kingdom. This poorly defined geographical structure while rooted in the historical development pattern of the company has been retained in use possibly because of its generalised and therefore obscure character. It affords a competitor or analyst little information on the specific national sources of income particularly since the company does not list the countries falling in each region. In some cases, country locations can be assumed, such as Hong Kong falling within the Asia and Pacific Region. In others it is not as clear. Using the company's own group structure, however, we will briefly examine the group's existing policy and performance.

7.3.1 - Asia and Pacific

Close to 70% of the revenue of the company comes from its Asia and Pacific Region. In 1989, that region had a turnover of 893.6-million from an overall annual turnover of£1534.1 M. The main countries constituting C&W investments in this region are Hong Kong, Japan, China, Thailand, the Phillipines and Macau. By far the largest portion of regional turnover is likely to be contributed by Hong Kong, which dominates Cable and Wireless investment in that area. In 1981, Hong Kong alone contributed nearly two thirds of company profits [Guardian, June 14, 1990:9], and despite modest reductions in the company's stake in the colony since then, it remains the single most important investment location for Cable and Wireless. The Group owns 75.2 % of Hong Kong Telecommunications, which is the largest company quoted on the Hong Kong Stock Exchange. In 1988, C&W's stake in Hong Kong was reduced by 4.2% : 0.1 % having been sold to the Chinese government and 4.1% in a public offer taken up by investors from Hong Kong and the United States among others.

The Asia and Pacific Division, and Hong Kong in particular, demonstrates the case of a large multinational corporation being dependent on a single region for its annual profitability. Where this region is not the home market, we see a continuation if the trend identified by Hamilton [1986:17] of MNCs becoming dependent on foreign profits in order to confront oligopolistic competition in the home market. This dependence on Hong Kong by Cable and Wireless is a particularly sensitive policy problem for the its corporate strategists. It dramatises only too visibly the arguments of the structuralists that multinational surplus appropriation from the periphery contributes directly towards capital accumulation in the industrialised countries [Girvan 1976:12].

Currently, Hong Kong is a burgeoning telecommunications market. In 1989 the number of local telephone lines increased by 8.4% over the previous year, making for a total of 2.2 million lines in a population of 5.5 million people. Demands for business lines increased by 16 % in 1988-89, and the expansion of international telephony is even more dramatic. According to Cable and Wireless itself "The total of all outgoing calls including operator assisted, facsimile and data calls exceeded 441 million minutes, an increase of almost 40 % " [Annual Report 1989:8].

Against this encouraging background of explosive growth and rising profitability is the daunting political prospect of the re-integration of Hong Kong into China in 1997. The company is increasingly conscious of its vulnerability to political events over which neither its parent government nor itself has effective control. Major elements of corporate strategy, affecting all other regions, is therefore driven by uncertainty concerning the future of the company's principal income source.

Within the Asia and Pacific regions itself, the strategy involves building up co-operative relationships with the Chinese government, reflected in the sale of 0.1 % of Hong Kong Telecommunications to the Guangdong provincial PTT, the further sale in March 1990 of 20 % of Hong Kong Telecom to the Chinese Investment Agency CITIC, as well as the extension of a fibre-optic overland cable between Hong Kong and Guangzhou in the People's Republic of China. These moves, while building up strategic relationships, have also assisted in the objective of reducing dependence on this principal income source. It is estimated that from a pre-divestment high of close to 80%, Hong Kong's contribution to overall group profits in 1988 was some 62%, with the company's Chief Executive Officer projecting that this would be reduced to about 30 % of group profit by the end of the century.[Toronto Globe and Mail, August 8, 1989:B6].

The main significance of our analysis of Cable and Wireless strategy in the Asia and Pacific Region is to show the dominance of historically determined patterns of growth in the company, and the influence of this on overall corporate strategy. While political independence meant the loss of a secure monopoly in most major former British colonies, Hong Kong's remaining constitutional status as a British colony preserved for Cable and Wireless a unique, dominant role, exploited while the company was still a department of Her Majesty's government. This beneficial relationship continued to serve the company in the decade since privatization, providing a cash source for aggressive investment strategies in other regions, including a consolidation of its position in the Caribbean, the development of a market base in the United States and especially in the re-establishment of the company as a force within the telecommunications market of its home base in the United Kingdom.

As the role of Britain continued to wane and the last vestiges of its colonial empire disappear, Cable and Wireless has been faced with the necessity to adjust its international strategy in line with less reliance on the pro-active parent state. Nonetheless, the company has grown up and continued to benefit from the foundations laid in the previous era as a state-owned or quasi-statutory institution. Host governments and other actors in the global periphery that form the main income sources of the company will need to be aware of both the historical and contemporary factors influencing adjustments in corporate strategy and adjustments which affect the operation of each region.

7.3.2 - United Kingdom Region

Parallel to the initiatives to reduce reliance on Hong Kong, the company has been moving to strengthen its income generation and presence in the U.K. market, its home base. Its historical role as a telecommunications carrier for the colonial empire emerged in 1947, when it was nationalised and its U.K. operations taken over by the Telecommunications Branch of the Post Office (the latter becoming British Telecom in a later re-organization). Cable and Wireless, therefore, lost its home base, and was left to operate the empire's telecommunications system on concessionary arrangements with the respective colonial governments.

The emergence of a majority of colonies into independence, particularly in the 1950s and 1960s, saw many of the new national governments either opting to operate their own telecommunications systems or to otherwise increase national control over Cable and Wireless' operations within their territories. The resulting diminution of the company's concessionary business, stimulated renewed attention to greater investment and trading activities at home.

The company's divestment in 1981 provided a further impetus to this search for a local base to supplement international activities. The process was initiated in earnest with the acquisition of a minor percentage of the small U.K. telecommunications firm Mercury. In 1984, Cable and Wireless completed the takeover of Mercury with the purchase of the remaining 50 % of Mercury shares from British Petroleum. Mercury has become the centrepiece of the company's strategy to recover a share of the British telecommunications market. In 1986 Mercury announced the launch of a national and international telephone service in Britain, initiating an alternative to the then existing British Telecom monopoly. The new company invested extensively in new technology with a focus on the business user.

Within two years it had established an inter-city British fibre-optic cable network, and began negotiating a series of co-operative agreements for international switched telephone services, including with AT&T in the United States. After an initial loss-making period spanning 1984-1987, Mercury is claimed to have broken into profitable trading in 1989: "Its turnover has increased by 148 % from £73-million to £181 - million, whilst last year's trading loss of 11 million has been turned to a very satisfactory trading profit of £18 million." [Chairman's Report, C&W 1989:3] The acquisition of the firm Telephone Rentals represents part of this consolidation of the U.K. region, whose trading profit has grown from less than 1 % to some 10% of total group trading profit in 1989.

Prior to 1984, the financial performance of Cable and Wireless was entirely dependent on the prevailing conditions outside of the United Kingdom. This flowed from the situation preceding nationalization in which "the commercal basis of the group's operations and the economic environment, including pay and prices, in which it works, are determined by the policies of the governments concerned" [Select Committee Report 1976:2]. In 1974-75, for example, 98% of the group's gross revenue of£79.8 million was earned overseas, primarily from Hong Kong, the Caribbean and the Middle East. In response to this failure to build up U.K. earnings, the company is seeking to recover a substantial segment of its home market by taking advantage of its position as an international carrier, to accumulate revenues on the Mercury account from its incoming calls. The development of the United Kingdom region, remains an important, though as yet unachieved element, in a global strategy to become the 'world telephone company'.

The main operational form of this new geocentric strategy is the company's concept of providing a 'global digital highway', offering alternative telecommunications routing to and from most destinations in the world. In that respect, the development of Mercury, important as it is in exploiting the home market, should be seen as but another link in a wider global strategy of a company embarked on a new expansionary phase. The acquisition in 1989 of a 20% interest in the U.K. firm Export Network Limited signals the intention of Cable and Wireless to expand beyond conventional telecommunications services into the computerised desk top information trading networks which have catapulted the Reuters Group into higher and more secure profitability. The international reach and firm-specific advantages of C&W will be of major benefit in the pursuit of these global objectives.

7.3.3 - Middle East, Indian Ocean And Africa Region.

This region is by far the smallest and least profitable within the Cable and Wireless Group. It contributed £45.4 million to Group turnover in 1989 and ended the period with a trading profit of £14.7 million, down some £2 million on the previous year's performance. The largest income earner for the region was the Group's 40 % interest in the Bahrain Telecommunications Company. However, in January 1989 a half of this shareholding was acquired by the Bahrain government. The company retains small holdings in the telecommunications systems of the Yemen Arab Republic, Seychelles and Saudi Arabia, where Cable and Wireless provides important elements of communication to the Saudi National Guard, under contract with the United Kingdom Ministry of Defence.

In Africa, where the company's involvement was never extensive, its only remaining significant investment is with the Sierra Leone External Telecommunications Limited in which the Group owns 49 %. Among the main new investment in the overall region is in a new digital network for the Falklands/Malvinas Islands, under a 22-year licence negotiated with the British controlled Falklands Islands government.

Cable and Wireless' 'Middle East, Indian Ocean and Africa' Region has been the area most affected by withdrawals of concessions and by nationalizations as countries became either independent, economically stable or otherwise capable of operating their own telephone and telecommunications systems. Numerous countries which even in 1975 were among the Group's important business clients, were no longer listed as 'principal subsidiary companies, associated companies and trade investments' by 1989. In this region alone, these include Botswana, Kenya, the Cameroons, Sudan, the Gambia, Pakistan, the United Arab Emirates, Qatar and Oman. Nationalism and an early identification of telecommunications as development tools are likely to have contributed to the withdrawal or reduction of concessions to the externally based Cable and Wireless. In the case of the Middle Eastern countries, rapid economic development derived principally from oil revenues, as well as American competition, would also have played a role in reducing the region's dependence on maintaining concessions with the company.

7.3.4 - The Western Hemisphere Region

The level of instability faced by Cable and Wireless in the Middle East, Indian Ocean and Africa region contrasts significantly with the relative stability which the Company has experienced in the Caribbean over the last decade, and the significant growth which has taken place in the United States operations over the same period. Indeed, in the Caribbean, Cable and Wireless has been INCREASING its equity holding and investment control during the last five years, despite some earlier post-independence adjustments in the company's equity status in the larger territories. Detailed consideration of these issues relating to Cable and Wireless and the Modern Caribbean will be undertaken separately, and therefore our discussion here of the Western Hemisphere Region will proceed in relation to the non-Caribbean components of the region, primarily the United States.

Cable and Wireless' operations in the United States take place primarily in the non-concessional sector. It involves the management and operation of private telecommunications networks, consultancies on telecommunications projects in both the private and public sectors, provision of data processing facilities and the distribution of telecommunications and allied equipment. Its operation in the US market has been significantly boosted by liberalization of telecommunications in that country as well as by a series of company acquisitions and joint venture projects.

Cable and Wireless Communications Inc., the Group's U.S.-based telephone marketing subsidiary (formerly TDX) provides a digital coast to coast network covering some 17,200 route miles. The network is largely operated by another Cable and Wireless subsidiary Cable and Wireless Management Services Inc, providing inter-city route diversity for a growing number of business users and local carriers. In 1988, the company reported that 'more than 200 of the USA's heaviest telecommunications users, including 30 communications carriers, have already leased capacity, while another 50,000 North American businesses increased their use of the Group's long distance services by 21% to pass 630 million minutes of traffic over the network.'[Annual Report 1988:18]. As an indication of the pace of growth, the customer base of this service increased by 20% in the financial year ending March 1989. Between 1985 and 1988 traffic on the network increased by approximately 100%, and in 1989 alone grew by a further 33% [Annual Reports 1985:11, 1989:10].

While providing alternative routes and interconnectivity within the United States itself, the U.S network also forms an important segment of the the company's major strategy for the establishment of a global network described as the 'Global Digital Highway'. Cable and Wireless' 1989 joint co-operation agreement with the American long distance carrier US Sprint laid the foundation for enhanced international marketing of the jointly-owned trans-Atlantic optical fibre cable system called PTAT. The PTAT system, with a spur to the Caribbean via Bermuda, will also create an important link between the United States network and the growing United Kingdom infra-structure operated by Mercury.

Another linkage via the Private Pacific Cable (PPAC), will connect these networks into the Japanese and other Pacific systems operated by Cable and Wireless and its partners. PPAC is operated by International Digital Communications(IDC) which is a joint venture between Pacific Telesis of the United States, Cable and Wireless, and C.Itoh and Toyota of Japan. This and other joint projects represent significant undertakings by Cable and Wireless within the United States, which now forms the major contributor to corporate turnover within the Western Hemisphere Region.

In 1989, that region had a turnover of £317.6 million. But only £60.3 million was declared as the regional trading profit, suggesting a high level of operating costs and investments. The 1989 performance compares favourably, however with the previous year when turnover was £289.5 million and trading profits £48.8 million. On the basis of a 1989 regional analysis of the trading results of the Group, the Western Hemisphere Region represented the second most profitable region for Cable and Wireless, despite the rapid growth recorded in the United Kingdom Region over the last three years. Although the leading region, Asia and the Pacific, returned profits well over four times that of the Western Hemisphere in 1989, growth trends in the Western Hemisphere Region and projected reductions in dependence on Hong Kong would seem to indicate a larger role for the Western Hemisphere region, including the Caribbean and the United States.

The central corporate strategy of the 'global digital highway' appears to rely heavily on continued access to the U.S. market, while the company's data transmission plans are heavily linked to Caribbean labour conditions, particularly in Jamaica and St Lucia where 'experimental' teleport facilities have been sited.

7.4 - CONCLUSION

On the basis of the foregoing research data and analysis, there can be little doubt that Cable and Wireless has become a highly profitable and expanding Group. Its levels of profitability has increased many times over in the last decade since it has been operating as a private company. An inevitable question is what accounts for this remarkable profitability and growth. Over the last decade, Cable and Wireless' rapid corporate growths may be attributed to several factors. Performance was considerably boosted by the continued growth in the global information and telecommunications services sector, which the company exploited both in the United States and particularly in its traditional major income source, Hong Kong. Its large global operation meant that the company was able to benefit from both economies of scale and from the adoption of already developed new technologies without incurring any major research and development expenditures of its own.

The company's increased corporate flexibility arising from its divestment also made an important contribution. State ownership had reduced the imperative of internal efficiency as the sole basis of the organization's survival. Privatization brought greater flexibility and an emphasis on improved management, contributing significantly to enhanced international confidence and internal morale. The clear articulation of a renewed global development strategy lent dynamism and focus to the company's modern image, thereby attracting to it a range of new commercial partnerships and investment opportunities.

Even while establishing a pattern of growth, the company managed to increase its investment in new and potentially dramatic growth areas. Its successful launch of Mercury and acquisition of Radio Rentals, its continued expansion in the United States market, and its investment in teleport and data entry facilities in the Caribbean are all intended to further diversify its income sources away from the Asia and Pacific Region, which the company nonetheless continued to develop through new agreements with China.

In some of its traditional markets, however, the company's position was facilitated by an increase in the level of external debt by partner governments, leading to greater multilateral lending agency demands for telecommunications divestment. While such policy approaches may be beneficial in the industrialised economies, their application to the problems of underdeveloped regions has increasingly been called into question [Beckford and Witter 1980: 133, Manley 1987:170, Raghavan 1990 :73]. In the following penultimate chapter, we consider the impact of multinational companies and overseas lending agencies on the regional telecommunications policy process. The role of Cable and Wireless, regional states and non-governmental organizations will receive particular emphasis.

PART 3

TELECOMMUNICATIONS IN THE POST COLONIAL CARIBBEAN

CHAPTER 8

CABLE AND WIRELESS AND THE MODERN CARIBBEAN

We examine in this Chapter the nature and extent of the involvement by Cable and Wireless in the telecommunications services of the modern Caribbean, and the national and regional policy responses to this. Among the main issues confronting national policy planners in the region is how far the benefits of telecommunications can be enlisted as a deliberate part of the process of national development, or alternatively, whether telecommunications is simply another zone for uninhibited foreign direct investment.

We begin, therefore, with an overview of the debate on the role of telecommunications in development and the related area of technology transfer. We will be attempting, in the process, to apply our conclusions to the situation existing in the Caribbean. The structure and ownership of the regional telecommunications network will be outlined and discussed, as well as the prevailing scenario regarding service delivery, regulation and collective policy planning.

8.1 - TELECOMMUNICATIONS AND DEVELOPMENT

The global trade in telecommunications and information services is a vast and rapidly growing industry. In 1990, global sales in telecommunications equipment and services were estimated by the U.S. National Telecommunications Information Administration to reach US$ 540-billion, in an overall world information trade worth more than US$ 830-billion [Adams 1988: 55]. The vast majority of this trade is conducted by multinational corporations and takes place within the urban and industrial sectors of the developed world, although rapid growth in the sector is also projected in the underdeveloped countries. The Caribbean Association of National Telecommunications Organizations (CANTO) estimated that between 1988 and 1993, telecommunications expenditure by sixteen national service providers in the region would exceed US$ 3.5 -billion [CANTO 1987: 3].

In 1985, in the early stages of this burgeoning growth in global telecommunications trade and investment, the International Commission for Worldwide Telecommunications Development [ICWTD] highlighted the acute inequality in the global distribution of telecommunications services. We have already referred in Chapter 2 to the contrasting statistics in service provision between the underdeveloped and the industrialised countries. But among the other issues brought to the fore by the Commission's Maitland Report was the question of the extent to which telecommunications contributed to the process of national development. And while the Commission came out in strong endorsement of the view that telecommunications could play a major role in economic and social development, earlier debate on the issue was far less clear-cut.

While finding a co-relation between personal wealth and telephone usage, earlier studies failed to convince both government planners and international lending agencies that investment in telecommunications gave rise to macro-economic growth. Hardy's model, described by Hudson, attempted to use time series analysis and co-relational data to establish the contribution of telecommunication investment to growth, using per capita gross domestic product (GDP) measurements. While the model showed that a higher telephone density preceded economic development, it left open the probability that overall economic development itself contributed to telecommunications expansion, as more resources were released for investment in the sector [Hudson 1985: 195-196].

Other studies [Leff 1984, Wellenius 1984, Gille 1986] have linked both industrial growth and rural development with increased telecommunications investment in underdeveloped countries. However, it was a study by Charles Jonscher of small business operations in Costa Rica which was among the most impactful in pointing out the specific productivity gains to be derived in specific sectors, such as rural communities, from increased investment in basic telecommunications [Jonscher 1987:46]. Earlier studies by Saunders, Warford and Wellenius

[1983], Hudson [1984] and Jonscher [1985] focussed governmental attention on the under-funding of the sector compared with its importance in both the national and global development contexts.

According to Jonscher, "The importance of the telecommunications network arises from the fact that it provides the backbone of the information infrastructure of a country" since it provides the "basic facility through which the information needs of government, industry and commerce can be satisfied." [1985: 22]. Commenting particularly on the potential ECONOMIC advantages of improved telecommunications, Jonscher postulates that "the principle that speedy communication leads to efficient market operation is as true for village trading as for international commodity dealing." However, he notes that the tendency for rural areas to be neglected in the growth of national telecommunication infrastructures often had important negative effects on agriculture. Telecommunication services can help farmers to "arrange for timely supplies, effective collection of produce and access to agricultural information". It can also provide the infrastructure for instructional broadcasts to rural farming communities [Jonscher 1985: 23].

Heather Hudson, in supporting this point of view, argues that the large multinational companies are unwilling to take the risks perceived to be involved in investment in rural telecommunications, preferring instead the relatively more well known terrain of the urban business users. But she cites studies to show that both social and economic benefits of investment in telecommunications may be greatest in rural and remote areas [Hudson 1985:195]. She notes that "where telecommunications services are available, rural people often use them more heavily and spend more of their disposable incomes on telephone calls and telegraph than do city dwellers" [1985: 198]. This is basically because in most cases the only alternative means of communicating quickly or frequently is by making trips - an exercise which is often both expensive and time-consuming. Put in economic terms, Hudson is indicating that benefits per telephone are likely to be greater where telephone density is lowest.

In their 1983 World Bank study, Saunders, Warford and Wellenius pointed to evidence which suggests "that with a reliable telecommunications system, new communication is generated, and stronger, more complex and more productive communication patterns built up, partly through direct and indirect interaction with numerous production and distribution functions." The study noted that in developing countries there was "a large excess demand for telecommunication services, and the measurable return on the investment required to provide those services are relatively high."[1983: 14].

Despite this, in its 1985 report to the ITU, the Maitland Commission noted that "in a majority of developing countries, the telecommunications system is inadequate to sustain essential services. In large tracts of territory, there is no system at all." [ICWTD 1985: 3]. The Commission recommended that "The telecommunication system in a developing country can be used not only to disseminate information of immediate importance on a national scale, but also as a channel for education, for strengthening the social fabric, for enriching the national culture." In addition to its essential role in emergencies and in health care, the Maitland Commission regards telecommunications as increasing "the efficiency of public administration, commerce and other economic activities."

Schmandt, Williams and Wilson [1989: 6] argued that the benefits of telecommunications for economic development may be viewed in at least two ways. One is the traditional state-centric approach, in which telecommunications inputs are viewed in light of their contribution to government's economic development programmes. This approach involves schemes to attract investment or promote business development within a state. The second approach, however, has a broader economic focus, which seeks to use telecommunications to enhance the productive capacity of the economy as a whole. In this approach, telecommunications is regarded as a factor of production in the economy, essential to all-round economic growth.

It would appear that the appeal of these arguments for telecommunications to be deployed in the service of economic and social development, depends to a large extent on whether the leading operators have a vested interest in the balanced and integrated development of the country or whether the basis of the involvement is primarily one of financial return on investment. In the view of Nathaniel Leff, the financial returns approach often understate the social benefit and externalities to be derived from the integration of telecommunications in national development.

Leff contends that evaluation of the advantages of telecommunications should not be confined simply to financial criteria, because socio-economic and political conditions in many developing countries often create substantial market imperfections. As a result, market prices of some inputs do not reflect their scarcity, and hence their true social cost. Instead he advocates the use of the more diverse methodology of Social Benefit Cost Analyses (SBCA). The approach recognises that "if a factor is used in one project, it cannot be used in another; hence the benefits foregone indicate the factors true cost." The concept is also applicable to output, where value is defined in terms of the project's contribution towards attaining the country's basic socio-economic objectives [Leff 1984: 219]. While conducting his study on behalf of the World Bank, Leff appears to question the extent to which the techniques were applied in the Bank's own decision-making processes.

Synopsis

While earlier studies failed to establish direct causation between telecommunications investment and economic development, a succession of more recent studies have indicated a positive co-relation between increased telecommunications provisions and the level of productivity in certain sectors such as rural agriculture and small business operation. At the same time, many of these studies have shown the global inequality between the telecommunications rich and poor, corresponding to the countries of the global Centre and those of the periphery respectively. Within countries, the gross disparity between telecommunications investment in urban areas compared to the sparcity of services in the rural and agricultural sectors has also been highlighted. Most of these studies have in common a call for greater multilateral investment support for telecommunications in underdeveloped territories, and especially in support of rural and agricultural sectors in the global and national peripheries.

8.2 - CARIBBEAN TELECOMS AND DEVELOPMENT

In the Caribbean, while several regional non-governmental organizations (NGOs) have attempted to use telecommunications to supplement overall development programmes, responsibility for the sector rests within the domain of the state. However, there is little to suggest that governments regard telecommunications as performing any special role in development, despite occasional rhetorical claims. With little active governmental support, the NGO efforts have been sporadic and their progress slow and unstable. They are adversely affected by high commercial tariffs as well as inadequate regional policy commitment and limited effective control over the network decision-making.

Among the more widely recognised Caribbean projects founded on the use of telecommunication for the collective benefit of the Caribbean is the University of the West Indies Distance Teaching Experiment (UWIDITE). The project enables interactive distance teaching at the tertiary level by linking the three main campuses of the regional university in Jamaica, Trinidad and Barbados by way of a leased network. The network also extends, though on a less reliable basis, to university extra-mural centres in six other eastern Caribbean territories. In its first five years, over 20 specialised courses had been taught, using the system to link students across the region to lecturers who were available in one territory only. It also enabled multi-point linkups to take place among university administrators across the region, reducing the necessity and cost for physical travel.

Although in operation since March 1983, the UWIDITE system remains in an 'experimental' mode, with very little modification and no major equipment replacement in the last seven years. In circumstances where telecommunications costs, even at a 20% discount, represent a third of the project's cost, severe financial difficulties have led to stagnation in both technology and scope. This is reflected in the continued use of aging slow scan equipment and remote loudspeakers, and frequent breakdown both of on-site equipment and transmission links [Lalor and Marrett 1986 :21-22].

The UWIDITE telecommunications project not only maximises the use of scarce teaching resources in certain fields, but also makes a positive contribution to regional integration by allowing simultaneous exchange of student and teacher inputs relating to common regional problems. Its benefits can be as broad as the range of courses and conferences which it hosts. But its integrative and development potential has been stifled by inadequate resourcing.

Two other regional services relying heavily on leased telecommunications facilities are the Caribbean News Agency (CANA) and the regional television programmes exchange system, CARIBSCOPE, operated by the Caribbean Broadcasting Union (CBU). Both projects aim at increasing the flow of regional news and programming, and were founded in response to the dominant foreign media content which pervaded the post-colonial Caribbean. In the case of television programme content, successive studies found imported material increasing significantly. "Moving from an average of 77% imported content in 1976 to an average of 87% in 1986, the annual increase of 1% though incremental, is cumulatively potentially devastating and detrimental to regional culture."[Brown 1987:19, See also Hosein 1976]

It is this problem that the CARIBVISION project seeks to address, according to Terrence Holder, Director General of the CBU. "Telecommunications is everything to us, because if in fact we are to exchange material and open a window on the Caribbean so Caribbean people can know what is going on in the other territories, we need to have some speedy channel. If it were not for telecommunications we would have to send our materials by aircraft, a method which I think is archaic. We are dealing with a commodity that is perishable and we have to move it from one place to another within the shortest possible time. So, we depend almost totally on telecommunication if we are to be effective." [Holder, Interview 3/10/89].

Holder points out that to their credit, some of the region's national telecommunications companies were involved in the initial establishment of the CARIBVISION project. He notes, however, that despite CARIBVISION'S heavy reliance on telecommunications, and the strategic importance of the project to the region, several of these national telecommunications service providers as well as the regional external carrier Cable and Wireless, still do not as yet see themselves as sharing responsibility to the people of the region to provide the CARIBVISION service at affordable rates. "We are talking about the costs of satellite services. It has got to come to a stage where we can use them without later having to close down the organization. Even in cases where the governments have had majority or outright ownership, we have not had the kind of concessionary rates which are necessary if we are to develop regional broadcasting." [Interview, Holder, 3/10/89].

But besides the need for what Holder describes as greater partnership and commitment from the telecommunications sector, he confronts an equally important structural problem: "The problem is that CBU is a regional organization, and in terms of telecommunications, the organizations are in fact national and not regional. So the CBU is dealing with BET in Barbados, Textel in Trinidad and Jamintel in Jamaica. So the CBU has not had any dialogue with any regional telecommunication organization in this respect. But we do try to draw them individually into our policy planning process." [Interview, Holder: 2/10/89].

A similar set of difficulties exist in the operation of the Caribbean News Agency, CANA. Since the start of its operation in 1976, CANA's regional coverage recorded an annual average increase of 48.5% on the previous volume of regional coverage circulated by its predecessor, REUTERS. Heavy telecommunications costs and other recurrent expenditures, however, constrain the agency's future contribution to regional development. The Managing Director of CANA, Richard Henderson says the agency has to rely on Cable and Wireless and the national carriers to deliver its products. "But we find their costs tremendously prohibitive for us to venture too far out into the world or even outlying areas of the region itself. For example, we have never been able to serve Belize as we would wish, although Belize is a CARICOM member state, because of the high telecoms cost, for dedicated wire service circuits, for rental of printers and the purchase of teleprinter paper. So when we add the total cost, that is the basis on which we have to bill our subscribers." [Henderson, Interview: 5/10/89].

The CANA Managing Director observed that as commercial companies, regional telecommunications carriers have to seek to make a profit. Cable and Wireless, for example, benefitted from the charges for providing the teleprinter links between the islands. But he noted that the company had become engaged in a renewed drive in recent years: "What I found interesting enough is that in the last couple of year, Cable and Wireless, perhaps recognizing that computer terminals are the likely outcome of communications technology, seems to be buying back their original shares and even more in the telephone companies of the Caribbean. So if circuits become redundant as a means of delivery for CANA's teleprinter services, they will catch us on the telephone charges in relation to computer dial-up for users to gain access to CANA's computer system. So they catch us both ways." [Henderson, Interview: 5/10/89].

Synopsis

What the UWIDITE, CARIBVISION and CANA projects have in common is their heavy reliance on telecommunications and the difficulties associated with the absence of adequate regional resourcing and failure to fully exploit their significant development potential. The projects are very much the kinds of ventures which Cable and Wireless, as an external profit-making corporation can legitimately regard as outside its primary responsibility. This fact is in itself a disadvantage stemming from dominant external control of the inter-island network. But equally, the regional governments who owned the national telecommunications companies, have also failed to regard such projects and others, as part of the integrative and development tools of the region.

However, as we noted earlier, regional economic integration can also operate to the disadvantage of the less developed partners or rural areas within the community. Problems of polarization of development towards the more advanced areas can distort rather than facilitate economic development. This concern was among the initial reservations of the LDCs at the CARIFTA stage of the regional integration process. Shields and Samarajiva [1990: 205] have similarly pointed out that the use of telecommunications to help achieve national or regional integration is also not an unproblematic proposition. "The fact that integration detracts from the rights of rural communities to define their development priorities is [often] ignored. For example, there is a very strong likelihood that improved two-way communication between the city and the hinterland may result in the ruin of the local traders in the short term and the incorporation of hitherto relatively self-contained politico-economic entities in the long term."[Shields and Samarajiva 1990: 205].

These observations particularly have to be taken into account where the integration process involves sovereign states, such as in the Caribbean. But it should also be recognised that integration, by its very character, involves trade-offs. And where adequate planning and regulation accompany the process, existing values can either be preserved or even combined with new ideas and practices. Communication channels are indeed carriers of both information and power, but the imbalance in the flow of both can be moderated if the danger is consciously acknowledged in the planning, monitoring and regulatory processes.

8.3 - THE ORDERING OF SOCIAL PRIORITIES

Although telecommunications is widely accepted as a catalyst to economic growth and an important interactive link within and between societies and groups, it is not universally regarded as automatically deserving of highest priority in the allocation of investment resources in developing countries. As the Caribbean cases demonstrate, governments appear to remain sceptical about how far telecommunications should receive priority attention. In common with the World Bank approach, Leff maintained that "projects in other sectors (e.g. nutrition, education, industry, agriculture etc) can also make strong claims to being crucial for development."[1984: 217]

However, he expects that social benefit cost analyses (SBCA) could advance deserving telecommunications programmes to the fore, especially if planners used an appropriate equity weighting, by which a higher value is assigned to projects that favour an LDC's poorer people or disadvantaged status. Leff notes that despite the World Bank's promotion of research on SBCA, there has been no change in the Bank's own allocational policy, which applies 'financial rate of return' criteria to telecommunications projects [Leff 1984: 221]. In the Caribbean, where the World Bank, together with the IMF perform what Leff calls its "instructional role in developing countries" [1984: 218], it is not surprising that telecommunications receives a relatively low priority. In the World Bank itself, one consequence of this constricted approach to resource allocation is a traditionally low level of loans disbursement for telecommunications projects, which moved from 3.6 % of loans in 1980 to 1% in 1986.

Caribbean policy-makers do face harsh competing claims on the limited available resources. But as Leff, Hudson, Saunders and others indicate, the choice is not simply between telecommunications and other sectors, since telecommunications is not an end in itself. Greater resource allocation to telecommunications can yield beneficial returns in other sectors of social need, such as education or transport, agricultural extension work or in the high foreign exchange earning sector of tourism. In the CARICOM region, where the average penetration rate is 12.16 lines per 100 of population compared with 78.4 in the United States, there remains extensive scope for network growth and improved service delivery.(See Table 10)

At the same time, the nature of the telecommunications technology and services will need to be appropriate to the conditions facing the countries and the region as a whole, and not just the commercial interests of the supplier or external carrier. According to Girvan, "the adequacy of the relationship between technology and development is ..measured as a function of the degree of local resource use and resource development, and the extent of local needs satisfaction." [1983: 12]. But whereas with telecommunications in the Caribbean, the cost of indigenous research and development (R&D) is prohibitive, there is all the more need for explicit technology policies including the methods and terms for technology transfer.

In addressing this issue, the Commonwealth Working Group on Technological Change points out that for policies and technologies to be appropriate, they need to fit with the size and technology base of the economy concerned. "Small states, the islands of the Pacific, the Caribbean and the Indian Ocean, have a high degree of dependence on imported technology. For them, technology policy involves the selection of a small number of high priority areas for technology development where the acquisition of local competence is crucial, possible and inexpensive, with a strong emphasis on regional collaboration to spread the overhead costs of R&D, training and education. Where there is reliance on foreign technology, small states can develop a capacity for gathering information, forecasting major technology changes which affect principal export products, selecting appropriate technology imports, bargaining and absorbing technical knowledge." [1985: 81].

The strategic importance of telecommunications to the Caribbean would recommend it as a suitable industry for treatment in the latter category. But its effect on labour displacement, will also need to be carefully taken into account. While Computer Based Message Systems (CBMS) and Electronic Funds Transfer [EFTs] networks, for example, may facilitate the large urban business users such as multinational banks and major corporations, the

TABLE 10

TELEPHONE PENETRATION RATES IN CARICOM - 1989

Country	Lines/100 of pop
Antigua	7.2
Barbados	28.1
Bahamas	23.0
Belize	6.0
Dominica	9.9
Guyana	4.0
Grenada	4.1
Jamaica	3.5
Montserrat	25.9
St Kitts	15.7
St Lucia	8.3
St Vincent	9.1
Trinidad and Tobago	13.4
CARICOM AVERAGE	12.16
USA AVERAGE (1982)*	78.4

Sources : Complied from Cable and Wireless Statistics and Interviews, Dec 1989.
* AT&T - The World's Telephones, 1982

effect on job-loss in unemployment-ridden economies could offset any gains involved. And while the infrastructure for these advanced facilities are multiplied in the developed parts of the region, the very low levels of penetration of the ordinary telephone in rural areas and in some less developed territories often means exclusion of large sections of the population from the network or their reliance on the century old telegram service technology. The duality of such resource allocation could result in telecommunications undermining rather than enhancing regional integration and balanced development.

8.4 - SYSTEM OVERVIEW

In 1989, Cable and Wireless (West Indies) Limited maintained operations under franchise from the governments of 15 regional territories. The specific levels of the company's involvement in different Caribbean countries vary, as set out in Table 11. This shows that in nine of these territories, Cable and Wireless had a 100% ownership which was reflected in a monopoly of both domestic and overseas telecom services in these countries. In five other territories it is the majority shareholder or managing partner, and in the remaining country, which operates its own local telephone company, Cable and Wireless is the monopoly owner of the overseas service.

In addition, the company owns the transmission network linking the territories of the region, and the main links between the region and the rest of the world. Cable and Wireless also now holds majority control of the data-processing and teleport facility called Jamaica Digiport International (JDI), based in Montego Bay, Jamaica and is sole owner of a similar but smaller facility in St Lucia. The company originally held 35 % equity in the JDI consortium, in which the American telecommunications giant AT&T also held 35%. Telecommunications of Jamaica (TOJ), then a majority-owned government company, held the remaining 30% of the shares. However, since JDI's establishment in 1988, Cable and Wireless has secured majority ownership in TOJ, thereby effectively also acquiring majority control of JDI.

Ironically, the original idea of a high technology data processing and transmission facility in Jamaica, the first of its kind in the English-speaking Caribbean, neither originated with nor involved Cable and Wireless. The original project involved Teleport International, a consortium of United States and Japanese companies. These included the former Continental Telephone Company, now CONTEL; American Satellite Corporation (ASC), Nippon Telegraph and Telephone, and C.Itoh. The project collapsed in 1988, however, after an appeal court in the United States overruled a Federal Communications Commission (FCC) permission for the consortium to use U.S. domestic satellite services provided by ASC.

According to Demac and Morrison "the Court noted that 1981 State Department guidelines for international use of U.S. domsats established two criteria for authorising transborder services. These were that the INTELSAT system be unable to provide the services at issue; or that use of the INTELSAT system would be 'clearly uneconomical or impractical'. It held that the FCC decision had not adequately met these criteria." [Demac and Morrison 1989: 56].

Before the Teleport crisis flowing from this ruling emerged, however, Cable and Wireless began to take its own defensive action to secure an independent presence in the potentially lucrative data-processing business in a region where the company otherwise dominated. In late 1988, Cable and Wireless opened its own teleport facility in St Lucia, "in advance of the overall transmission plan" [Cable and Wireless 1989: 6]. However, the collapse of the Teleport project opened the way for Cable and Wireless' involvement in the Montego Bay facility, in a new consortium with TOJ and AT&T.

Synopsis

This situation has left Cable and Wireless with control not only of the traditional voice telephony of the region but also over the data transmission business. Competition from teleport facilities in the Dominican Republic and the Dutch Antilles for the processing of coupons and directories, for reservation and telemarketing services, computer mapping (CAD), programming and text editing from the U.S. market will determine the rate of growth of the Cable and Wireless controlled data facilities in both Montego Bay and Castries. The initially, competition - motivated duplication of these facilities in a region with a

TABLE 11

C&W CARIBBEAN OWNERSHIP OF TELECOMS

Country	Percentage of C&W Ownership in Local Telco	Overseas Carrier
	%	%
Anguilla	100	100
Antigua	0	100
Barbados	60	65
Bermuda	100	100
Br. Virgin Is.	100	100
Cayman Is.	100	100
Dominica	100	100
Grenada	49*	49*
Jamaica	79*	79*
Montserrat	100	100
St Kitts	80*	80*
St Lucia	100	100
St Vincent	100	100
Trinidad & Tobago	49	49
Turks Is.	100	100

Sources: Complied from Interviews: Nov-Jan 1989-90 and Company Records, Companies House 1990.

* Single merged company.

deteriorating basic telephone service and massive subscriber waiting lists, demonstrates the absence of adequate regional planning, technology transfer or regulatory control. The flow of business to both the Montego Bay and the St Lucia facilities was very slow in 1989 with a projection of further uncertainty in the face of a downturn in the United States marketplace as well as inadequate advance training arrangements for local data entry and other personnel.

8.4.1 - The Transmission Network

The chain of islands in the Eastern Caribbean are linked by a Cable and Wireless-owned Digital Eastern Caribbean Microwave System (DECMS) spanning 1200 kilometres from the British Virgin Islands in the north to Trinidad and Tobago in the south. Illustrated in Figure 2, this modern digital system has an ultimate capacity of the equivalent of 10,000 voice channels. The new system was completed in April 1989, and replaced the initial analogue microwave radio system introduced in 1977. The old system carried 960 voice channels and also provided the Eastern Caribbean with the broadband capacity to receive international television transmissions. The microwave relay was itself preceded by a tropospheric scatter system capable of providing some 80 voice circuits. Throughout these successive changes, the technology, equipment and routes had remained in the same ownership, that of Cable and Wireless, and its antecedent British companies since 1877, when the West India and Panama Telegraph Company was first launched.

The establishment of an effective communication system by microwave radio spanning the extensive distances between some Eastern Caribbean islands, and covering the total expanse of about 800 miles was considered a unique and considerable feat of engineering by Cable and Wireless. This was undertaken by the company despite it being "difficult to justify commercially" [Barty-King 1979: 354]. Why then did the company incur its share of the EC $14-million involved. According to Barty-King, the company's own historian, the achievement was "a useful sales tool when it came to selling systems in the future". In addition, he noted the political considerations involved in investing at a time when a large number of Caribbean territories were achieving political independence in a region which was likely to require "a modern telecommunication system ...to attract trade and commerce and so improve the economy." It would not have been the first time that experimental ventures with a global potential were first tested in the microcosm of the Company's Caribbean network.

The telecommunication traffic into and out of the modern Caribbean now proceeds by way of at least three routes. As indicated by the map at Figure 3, the northern end of the Digital Eastern Caribbean Microwave System (DECMS) in Tortola joins the Bermuda-Tortola Fibre Optic Cable to Bermuda. At Bermuda, linkage to both North America and Europe is effected through the newly built Private TransAtlantic Telecommunications Systems, Inc. (PTAT), owned by Cable and Wireless and operated by its

Figure 2

Source: Cable and Wireless

U.K.subsidiary Mercury. This route via Bermuda and North America to Europe was initially charted for the now obsolescent low capacity submarine cables of the colonially inspired Atlantic Telegraph Company and the West India and Panama Company.

An alternative cable routing out of the region is via Jamaica, using the predominantly American engineered Trans Caribbean System (TCS-1). The system's fibre optic cable extends from Florida in the United States to Puerto Rico, and the Dominican Republic, where it branches west to Jamaica and South to Columbia. The network, which was scheduled for completion in April 1990, represents the first significant modern alternative to the historical dominance of Cable and Wireless overseas transmission facilities in the region. Yet, as can be seen from the map at Figure 4, it particularly covers that non-English-speaking part of the region which is most closely associated with United States dominance or corporate priority.

In this regard, as with the initial submarine cables of the British, TCS-1 not only by-passes but actually circumvents Cuba, which, under the U.S. Caribbean Basin Initiative (CBI) classifications, is politically unacceptable. The TCS-1, therefore, perpetuates the long-standing political criteria for the configuration of Caribbean telecommunications infrastructure. And by not extending the TCS-1 link into the south eastern Caribbean, the American policy-makers also appear to be unwilling to challenge the historical and contemporary control of Cable and Wireless over the transmission facilities linking the

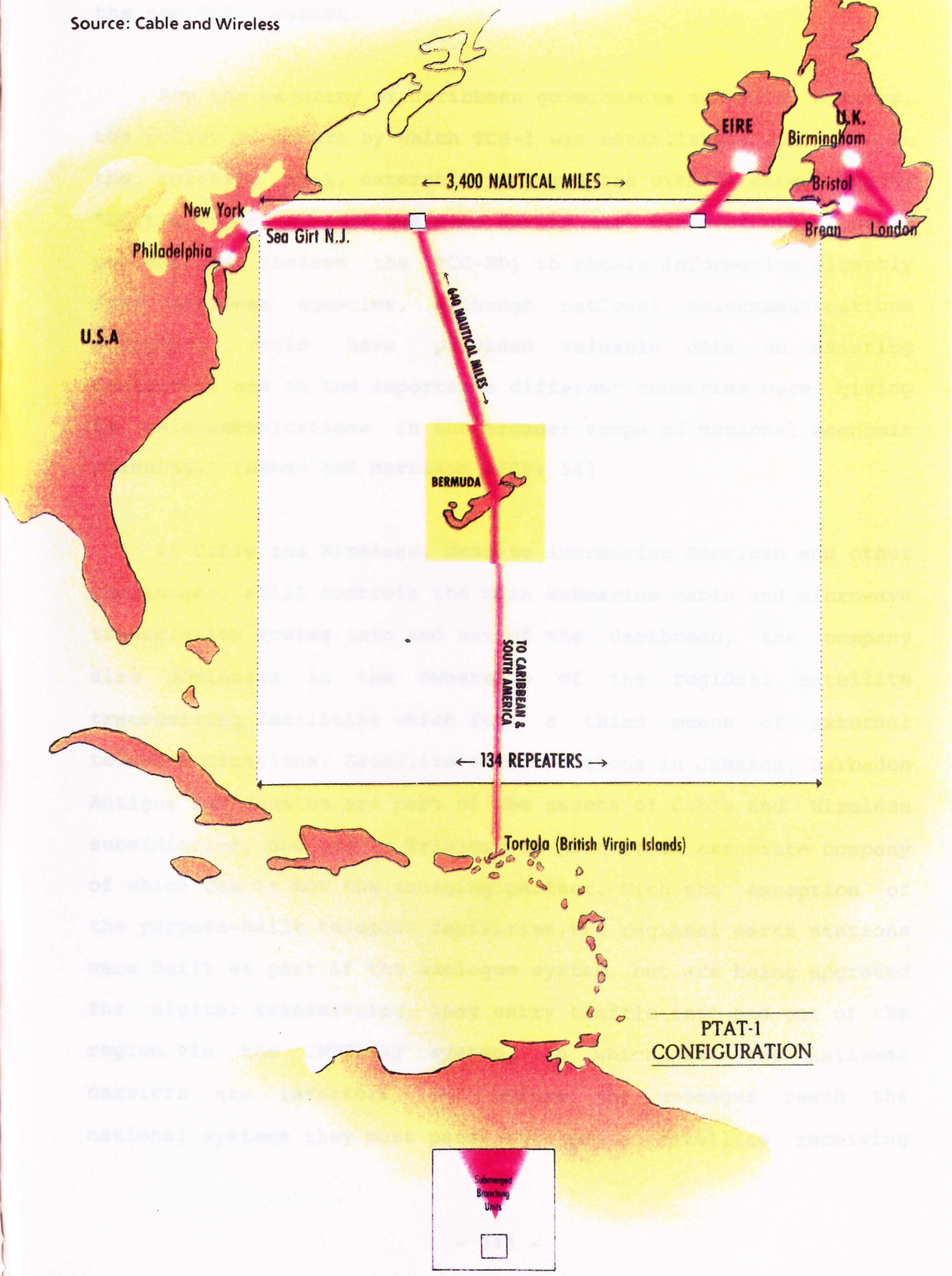
English-speaking Caribbean to the rest of the world.

The TCS-1 System, as Demac and Morrison suggest, is aimed at providing infra-structural support for American economic objectives articulated in the Caribbean Basin Initiative (CBI) of 1983. Despite the provision of preferential access to certain US products and services, "the CBI has not generated the expected growth in commercial ventures, partly due to corporate concerns regarding unreliable and otherwise insufficient channels in the Caribbean for transmitting voice and data." [Demac and Morrison 1989: 52]. The response to this situation, in the form of TCS-1, bears close parallel with the objectives which motivated the British, nearly a century and quarter earlier to establish their communication network in the English-speaking region. It is the dominance of this older European-oriented telecommunications system which has itself given rise to such corporate concerns in the new American imperial centre.

However, the ownership of TCS-1 suggests that a wider range of extra-regional telecommunications interests are in the vanguard of this new American led imperialism, and not the monopoly thrust of the earlier British colonial venture. Among TCS-1 owners are AT&T, U.S. Sprint, MCI International and its two associated companies RCA Global Transoceanic and Western Union. At the same time, Cable and Wireless itself, and its major subsidiaries in the region, (JAMINTEL, TEXTEL and BET), have also secured minority equity participation in the venture based on the need for interconnectivity between the networks which they operate and

Figure 3

Source: Cable and Wireless

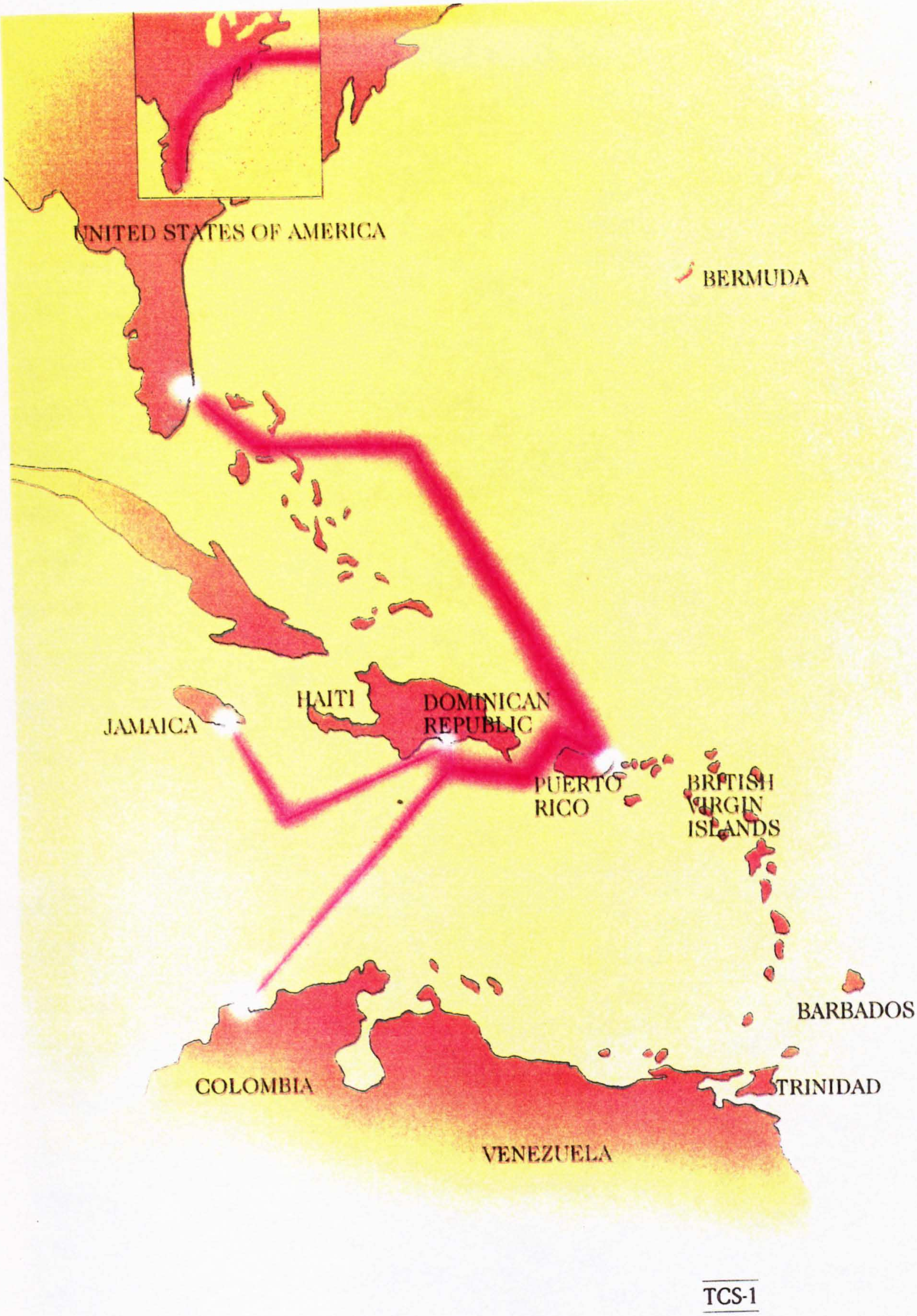


PTAT-1 CONFIGURATION

the new TCS-1 system.

For the majority of Caribbean governments and PTTs, however, the policy procedure by which TCS-1 was established, was, as in the colonial past, externally imposed and without consultation: "Little formal attempt was made during the transcaribbean cable proceedings {before the FCC-HD} to obtain information directly from Caribbean agencies, although national telecommunications officials could have provided valuable data on existing facilities and on the importance different countries were giving to telecommunications in the broader scope of national economic planning." [Demac and Morrison 1989: 54].

If Cable and Wireless, despite increasing American and other challenges, still controls the main submarine cable and microwave transmission routes into and out of the Caribbean, the company also dominates in the ownership of the regional satellite transceiving facilities which form a third means of external telecommunications. Satellite earth stations in Jamaica, Barbados Antigua and Jamaica are part of the assets of Cable and Wireless subsidiaries, and one in Trinidad is part of an associate company of which C&W is now the managing partner. With the exception of the purpose-built teleport facilities,the regional earth stations were built as part of the analogue system, but are being upgraded for digital transmission. They carry traffic into and out of the region via the INTELSAT system, in which all the national carriers are investors. But before the messages reach the national systems they must pass through a satellite receiving



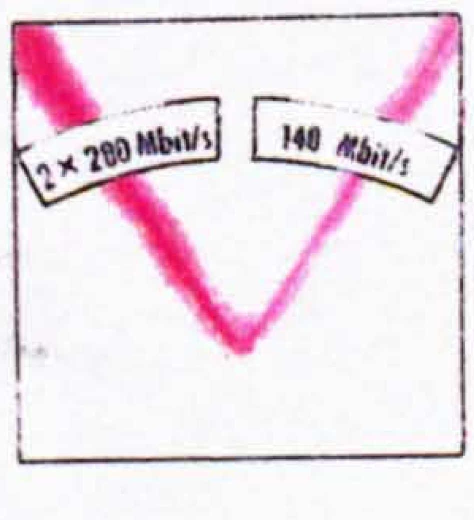


Figure 4

Source: Cable and Wireless

network predominantly owned by Cable and Wireless.

8.5 - EXTERNALLY IMPOSED POLICY

As the foregoing sections demonstrate, Caribbean states do not have formal regional telecommunications policies in operation. Instead, their unstated policy involves individual reliance on Cable and Wireless for leadership in network planning, investment and development, in the expectation that what is in the regional and global corporate interest of the company, will also redound to the benefit of the Caribbean. Despite the existence of a Telecommunications Desk in the CARICOM headquarters in Guyana, the company was until recently the sole operating entity with a region-wide scope for strategic planning and co-ordination.

In announcing, for example, a US $200-million investment programme in digital technology for the Caribbean area, the company stated: "As the Group operates in so many locations, it has been possible to co-ordinate centrally all the improvements on a regional basis, so that network flexibility and compatibility are assured. The digitalization of the region will lay the groundwork for the introduction of ISDN (Integrated Services Digital Network)...By the time THE GROUP (my emphasis) introduces ISDN, the Caribbean will have leap-frogged a whole epoch in the evolution of telecommunications technology into the age of information." [C&W 1988 :1].

This scheme, while well intentioned on the part of the company, had not been subject to any long-term evaluation of its overall implications for the region. The system configuration was not derived from any regional planning objectives. Its introduction into the region was not policy-directed, in Caribbean terms, but technology led and integrated only into the global corporate strategy of the external multinational corporation. As we noted earlier, similar external economic and geo-political factors also determined in 1989, the introduction and configuration of the Trans Caribbean (TCS-1) System led by AT&T and other American, British and Japanese investors. It appears that policy-making and implementation in modern Caribbean telecommunications, varies little from the previous era when fulfillment of British strategic and colonial objectives, was paramount.

If Cable and Wireless still exercises decisive leadership in long term investment and network strategies for the Caribbean, so too is its dominance over the mechanics of annual financial expenditures and planning. In a field interview, the retired General Manager of Cable and Wireless in Barbados between 1970 and 1984, Mr Paul Carrington, described how, as a local manager he was required in the normal company practice, to relate to corporate headquarters in London: "Financially, of course, we had to produce a budget every year and within that budget there was a capital expenditure forecast which needed to be approved or otherwise, by the Director responsible for the Caribbean. Then, as part of the budget were the operational plans which again required the approval of the Director, who had his own business operational unit in London to look at these things. I guess he would look at that in the context of his regional responsibility and see whether what I wanted to do was consistent with his regional plan." [Carrington, Interview 3/10/89].

In our earlier discussion of mechanisms for multinational control, we noted that irrespective of legal control, MNC headquarters frequently exercised operational direction through control of budgetary and investment decision-making. In the account of Mr Carrington, we see that Cable and Wireless was no exception. And the former General Manager indicated that there was no reason to believe that these mechanisms of operational control from the headquarters in London had changed significantly since the end of his incumbency. Indeed, the Cable and Wireless Director for North America and the Caribbean addresses regular annual meetings of managers of Group subsidiary companies, where he directs and co-ordinates budgetary planning with corporate regional and global strategies.

The setting of rates of return on investment as well as the level of tariffs for telecommunications services are also areas in which a vacuum of collective regional planning, permits Cable and Wireless to negotiate separate commercial deals with individual governments. In the case of Barbados, the former Permanent Secretary in the Ministry of Telecommunications and Transport, Mr C.M. Thompson indicates that while applications for increases in local telephone rates are considered by a Public

Utilities Board (PUB), no such procedure is applied for increases in the tariffs charged for external telecommunications. Overseas rate increases are approved at ministerial level.[Thompson, Interview 5/10/89]. This arrangement, subject to no public scrutiny and reduced likelihood of controversy, is favoured by the company. Accordingly, Cable and Wireless has managed to negotiate an extension of this approach to the setting of local rates to the arrangements in their Jamaica and Trinidad and Tobago operations.

Besides demonstrating the power and control of Cable and Wireless in the region, these arrangements are consistent with our argument that telecommunications policy is often a secret process, inhibiting public participation and re-inforcing elite control over policy. Such approaches are likely to increase with the growth of privatization and the attendant justification of secrecy on the basis of safeguarding corporate information against the competition. But in the process, important groups affected by these decisions are excluded from direct input, participation and access to relevant information. The situation of secrecy and separate negotiations militates against rational collective policy making in the region.

8.6 - IMF, DIVESTMENTS AND RATES OF RETURN

The company's rate of return on its investment is not subject to market conditions, as privatization would suggest. Nor is it indexed to the movement of costs or specific economic indicators. Instead, the rate of return is negotiated with individual governments and the agreed level inserted as a legal guarantee in the overall bi-lateral contractual arrangements. In its shareholders agreement with the government of Trinidad and Tobago it is provided that "The company shall be permitted to earn on its Domestic Operations an annual return of fifteen percent (15%) on the rate base." [Trinidad Guardian, January 19, 1990: 1] This 15%, according to the Agreement will be derived from domestic revenues after meeting all operating and maintenance expenses, all annual depreciation allowances and after meeting all taxes other than Trinidad and Tobago Corporation tax. The rate base itself is calculated on the value of fixed assets less depreciation provisions and a contribution towards construction costs.

Under the Agreement, the provision on rate of return was required to be converted into law. The exact wording of the legislation was drafted and included as Schedule 6 of the Agreement, which issues "Instructions to the Chief Parliamentary Counsel to prepare a Bill to amend the Trinidad and Tobago Telephone Act.." Among the amendments will be provisions that "the Public Utilities Commission (PUC) will be obliged to fix the tariffs chargeable by the company for its domestic operations at such rates that will result in a 15% return on the rate base..." In addition, under the agreement "The Chief Parliamentary Counsel will present the proposed legislation in draft form to the company and CWWI (Cable and Wireless West Indies Limited - HD) for their consent prior to presentation to Parliament." [Schedule 6 of Agreement, quoted in Trinidad Guardian 19-1-90 :1].

The occasion for this apparent dictation of terms to government was the company's acquisition of 49% of the shares of the Trinidad and Tobago Telephone Company (TELCO), at a cost of US$ 85-million. The first installment of US$ 50-million was to go directly to government revenues as a repayment for an earlier loan to TELCO. Part of this was to be paid "in U.S. dollars to the account of the Government at the Federal Reserve Bank of New York. Of the remainder, a sum of US$15-million was also to be paid to the Government in advance of its due date, in the form of a loan. This deal with Cable and Wireless was struck in the wake of a foreign exchange shortage in Trinidad, where part of the money was urgently required to meet external payments in advance of International Monetary Fund (IMF) performance evaluations of the Trinidad economy.

In these circumstances, it is difficult to discern policy from economic necessity, but the Trinidad government maintains that its sale of 49% of the previously wholly government-owned TELCO was a deliberate shift in policy towards partial divestment. Numerous bids from foreign investors were considered, but the Cabinet agreed to the sale to Cable and Wireless as the most suitable applicant. The company's success in gaining a hold on TELCO was consistent with similar successes in Jamaica and Grenada where it increased its equity in restructured holding companies which incorporate both the local telephone and the overseas telecommunications companies.

In Jamaica, moves aimed at a merger between the largely state-owned telephone company, JATELCO, and the overseas carrier JAMINTEL were initiated "as a result of negotiations in 1987 between the government and C&W." [Telecommunications of Jamaica 1988: 6]. At that time, Cable and Wireless had a 49 % stake in JAMINTEL and no equity participation in the larger JATELCO. The negotiations concluded in July 1987 with the formation of Telecommunications of Jamaica Limited (TOJ), in which government retained 53.1 %. Cable and Wireless obtained a 39 % equity holding in the merged company, thereby extending its investment beyond the overseas operating company and into the local telephone service. The remaining 7.9% of TOJ shares were owned by employees and members of the public. A legally guaranteed rate of return was also fixed, but at the higher level of "between 17 and 20 per cent" of the rate base. [Interview, Noel Rickards, President, Jamaica Telephone Company, 26/10/90.]

In 1989, government sold a further 20% of its holding in TOJ to Cable and Wireless, as a result of which the company became the majority shareholder with 59% of the TOJ equity. This decision by the Jamaican government restored to the British multinational firm both legal and operational control of the region's largest telecommunications network, and over one of the largest companies in the English-speaking Caribbean. In an attempt to establish the basis of this equity transfer, I asked the Jamaican Minister of Telecommunications and Transport what factors accounted for the government's decision. The following was his reply:

> "I think it was moreso economic. It had to do with foreign exchange constraints and of course the whole question of these companies being on the budget. The IMF watches these things very zealously. However, if the company is owned 51 % otherwise than government, it is not regarded as a government entity, although you could wield some amount of influence in terms of policy and other things. That was a consideration. So I think it was a mixture of economic and policy. Policy in the sense that you are trying to give yourself more room to do what you want to do, without being a burden on the budget, or without having to answer too many questions to the IMF." [Interview with Mr Robert Pickersgill 26/10/89].

The Minister's frank explanation of the major factors then motivating Jamaica's telecommunications decisions, makes it clear that external pressure from western multilateral lending agencies such as the IMF were the decisive influences on policy. And, in line with similar developments in Trinidad and Tobago, it also appears clear that foreign exchange deficiencies derived from the dependent character of regional economies, help to create the conditions for this external control. Indeed, within a year of gaining its majority control of TOJ, the company acquired the remaining 20 % of the shares held by government, thereby controlling an overwhelming 79% of the merged company by January 1990.

These contemporary developments support our contention that the dominating influence of the British imperial state on Caribbean telecommunications policies during colonialism, are now effectively being substituted by the equally dominant external influence of western lending agencies like the IMF. They also support our argument that now, as then, the leading beneficiary of such policies is the foreign multinational company, Cable and Wireless.

Besides benefitting, however, from the factors of internal foreign exchange shortage, debt and IMF economic hegemony, the resurgence of Cable and Wireless control of the regional telecommunications industry can also be accounted for by its control over the technology. The company's Regional Marketing Manager for the Bermuda and Caribbean area, A.E Fyfe, speaking in 1989, pointed to the pattern of technological growth experienced by the region. "Cable and Wireless has been in the Caribbean for 120 years. During the first 80 years there was only one service (Telegrams). And here we are after all that time with only three or four basic services (Telegrams, Telex, Telephony and Data). The next couple of years will see us move into some ten services, albeit some are (adaptations of) the old services."[Fyfe in Trincom 89: 31].

In the period when the telecommunications technology was mature and familiar, national Post and Telegraph administrations in the larger territories were able to acquire and easily manage their networks, with only a contracted involvement by Cable and Wireless after independence.

> "The history of this period has been that, as emergent countries have reached a particular stage in their development and have acquired the necessary technical and financial resources to do so, they have purchased the company's assets and taken over the operation of their own telecommunications services. In some cases the company has retained an interest as minority shareholder in joint companies formed with the governments concerned, which may continue for several years. Today the geographical spread of the company's activities is much reduced" [Select Committee Report, C&W, 1976:xiii].

As Fyfe noted, however, the 1980s saw rapid technological changes which multiplied the range of services and the very scope of telecommunications management. In addition to traditional services, Cable and Wireless was able to take advantage of advances in micro-electronics, digitalization and satellite technology to renew the network and launch a range of new services. These include regional voice mail, package switched data services, charging of calls to credit cards, regional toll free calling, cardphones, information access and resale, cellular radio and paging services, among others. The government-owned operating companies were individually unable to keep up with either the technology or the investment costs involved in these innovations.

Regional policy-makers were nonetheless, unwilling to forego this new technological phase, but were equally unable, for lack of the required technical evaluative institutions, to assess what elements of the new technologies, were relevant to the basic requirements for regional development. In this situation, and faced with IMF pressures and mounting fiscal and foreign exchange difficulties, the governments of the MDCs opted, to varying degrees, to release their equity control over the state-owned or partially nationalised operating companies. The response of the Jamaican Telecommunications Minister reflects this resignation, and is not untypical of policy-makers elsewhere in the region:

> "Cable and Wireless, as you know, are all over the Caribbean and its a company of world renown...They deal in the technology and as such are advantageous. I don't want to come across as promoting Cable and Wireless, but really, telecommunications moves at such a rate. I mean, today you think you have made strides, tomorrow its obsolete." [Pickersgill, Interview 26/10/ 89].

The evidence further suggests that, faced with this situation, individual national governments in the region were severely constrained in their ability to achieve policy self-determination in this sector. Although Trinidad and Tobago had by 1990 conceded only 49% of both local and overseas service companies to Cable and Wireless, the shareholders agreement granted executive management and financial control to the minority partner. In the case of Barbados, we have already outlined the procedure for headquarters' approval which a former C&W General Manager suggests still exists for financial and planning decisions by subsidiaries. And in a majority of the Eastern Caribbean LDC territories, the company enjoys a 100% monopoly. In Jamaica, the Minister points out that "we have representatives on the board, plus the chairman, who has to be a Jamaican." But he grants that this offers only a minimal level of real input:

> "We have a sufficient amount of...I don't want to say influence, but a certain amount of connection, and would know what is happening. But apart from that, in the final analysis, the government deals with the licence. And we have found that our views are treated with great courtesy and with respect and that's really all we ask."

While supporting, in principle,the use of telecommunications for national development, therefore, many Caribbean authorities were unable to retain the technical capacity and bureaucratic infrastructure to give effect to their aspirations. The privately-owned multinational structure in the region's telecommunications system limits the flexibility and scope for development-oriented and locally derived policies. this is especially the case while the constituent territories of Caribbean seek to operate individual policies. It was not until 1988/89 that the CARICOM governments officially recognised and accepted that the consequence of their continued fragmentation was an increasing marginalization within their own domain. An emboldened Cable and Wireless was reported to be making it clear that unless it had majority or operational control, it would not be willing to continue its programme of investment in the region.[Interview, C. M. Thompson, Barbados 5/10/89].

With the assistance of the CARICOM Secretariat, a draft agreement for the establishment of a regional telecommunication organization was circulated in March 1988, but was only ratified by ministers responsible for telecommunications in 1989. The organization, named the Caribbean Telecommunications Union (CTU), began operation from permanent offices in Trinidad in 1990. The preamble of its charter recognises "the sovereign right of each state to regulate its telecommunication system", "the growing importance of telecommunications for the social and economic development of all states", and "the need to foster international co-operation and economic and social development among peoples by means of efficient telecommunication services."

The objectives, functions, detailed organizational rules and structure of the CTU aim to co-relate the "planning, programming and development" of the regional and international networks, promote information exchange among PTTs, co-ordinate regional standards, harmonize Caribbean positions at international conferences, encourage the transfer of technology among member countries and foster greater awareness in the Caribbean of both telecommunications needs and its importance for the socio-economic development of the region.

8.7 - CHAPTER CONCLUSIONS

In line with the results of numerous research studies, some sectors of Caribbean society recognize the importance of telecommunications for regional economic growth, productivity and integration. This has been reflected in the establishment of a number of regional project utilizing telecommunications inputs as a primary part of a public service. However, these projects, while surviving, are severely constrained by the lack of adequate resources and co-ordinated planning. At the same time, the use of telecommunications for private capital appropriation by external multinational interests is on a dramatic path of expansion. Cable and Wireless embarked on a plan of increased acquisition of equity in national telecommunications companies to complement its monopoly control over the regional cable transmission and satellite transceiving systems. The company, in association with United States corporate interests, controls the major data-processing and teleport facility in the region, and has even moved into television broadcasting in one territory.

The position of Cable and Wireless is strengthened by internal weakness and indebtedness in the region, which were in turn related both the historically determined structural deficiencies, as well as policy failures within the region itself. The resulting economic vulnerability is reflected in direct control over decision-making by the multilateral representatives of western capital, the IMF and World Bank. Pressures by these institutions for divestment of state holding is telecommunications has functioned to the benefit of Cable and Wireless, whose agenda varies from the development goals of regional planners. While new systems and techniques abound in urban-based corporate telecommunications, Caribbean rural telecoms provisions remain neglected.

The regional political leadership has taken the first steps in improving policy co-ordination, with the establishment of the Caribbean Telecommunications Union (CTU). Its establishment, however, comes comes only after the consolidation of a new wave of external control of the Caribbean switching and transmission network and over the new data services. Given the extensive and growing foreign ownership of the telecommunications system, long-standing deficiencies in regulation and weak national policy planning structures, it would appear that the CTU by itself and as currently structured, is unlikely to provide an adequate long term response to the challenges facing Caribbean telecommunications. Both its limited staffing and financing are inconsistent with its wide ranging remit and objectives. It could, therefore, become severely constrained by poor resourcing, in the same manner as other important regional telecommunications initiatives such as the UWIDITE, CANA and CARIBVISION projects were limited.

In the concluding Chapter which follows, we present our final analysis of both the historical and contemporary problems raised by the empirical research presented in this study. We summarise our findings and conclusions and relate our assessments to the theoretical issues discussed, and to the propositions posited in the introduction.

CHAPTER 9

CONCLUDING ANALYSIS

In this concluding chapter, we discuss the findings of our overall research in relation to the theoretical framework outlined in Chapters 1 and 4. We present this final analysis in the same structure of the thesis, beginning with a synthesis of theoretical arguments and historical data from PART 1, and thereafter presenting the conclusions from the remaining PARTS. In the first section of this Chapter, therefore, we discuss our findings in relation to the proposition that public government, in the form of the British imperial state was a consistent and key actor in the expansion and growth of British private monopoly control of Caribbean telecommunications system.

We argue further that this system was designed, not just to improve imperial political administration of a distant and scattered region, but even more directly in support of private British capital accumulation in the wider Latin American area. A structural consequence of this process has been the distortion and duality which developed in the regional economies, and a telecommunications system more attuned to the needs of foreign capital than to the requirements of regional development.

9.1 - THEORETICAL ISSUES: IMPERIALISM AND UNDERDEVELOPMENT.

The early contacts between the European capitalist economies and the pre-capitalist formations in the colonial periphery were aimed at the opening up of new sources of raw materials and markets. In order to gain access to these resources, naval prowess and military power were among the key early requirements of European colonial conquest. By the mid 19th century a part of the overseas investment of the British imperialists was directed at the establishment in the colonies of telecommunications and rail systems, through the co-operative effort of capitalist industrial conglomerates and the imperial government itself.

Citing Britain's introduction of the railway network into colonial India, Karl Marx speculated that foreign capitalist investments in the infrastructures of colonies would create the foundations for industrial development in the periphery, as part of the global spread of capitalism over feudal relations [Marx 1853:5]. But experience of over a century and half has shown that penetration of the colonial peripheries with the infrastructure of industrial capitalism was not a sufficient basis for their industrialization and even less so for their development.

Such systems, according to the analysis of Innis, were designed not just to facilitate political control, but also as part of the supportive appendage to capital accumulation, competition and industrial expansion in Europe [Innis 1950:67]. Within the region's colonial economies themselves, however, the pattern of externally induced investment represented by the early telegraph companies and later by Cable and Wireless, was considered as creating major structural distortions, which conflicted with internally logical development goals. "The result...was almost always to create hybrid structures, part tending to behave as a capitalist system, part perpetuating the features of the previously existing system. The phenomenon of underdevelopment today is precisely a matter of this type of dualistic economy." [Furtado 1967:129].

According to the structuralist theories of the dependency school, the industrialization of the developed countries and the simultaneous underdevelopment in the colonial periphery are seen as two aspects of a single global and historical process. In economic development, as in the telecommunications sector, the industrial countries of Europe used the resources of the colonial south to build up their own dominance in technology, capital and in the creation of the communications and physical infrastructure to meet northern development objectives. This intrinsic inequality in the global structure imposed severe limits on the economic development of the underdeveloped regions, which 'can only expand as a reflection of the expansion of the dominant countries' [Dos Santos 1973: 76].

In the inherited telecommunication structures of the Caribbean, one of the consequences of this dualistic pattern of development was still evident in the neglect of rural areas and the concentration of the network in support of business and government in the main urban centres. For Johan Galtung, it resulted from a process of 'communications imperialism', in which 'vertical interactions' operated between urban-based bureaucratic and business elites located both in the industrialised capitals and in the urban centres of the peripheries. The system permitted little or no lateral communications at either poles, and in the south, resulted in a lack of integrated development of broadly national communications networks. In Galtung's unduly euphemistic term, there developed an acute internal 'disharmony of interest' between urban and rural areas.

It is not surprising, therefore that by the time the Caribbean colonies emerged into political independence starting in the early 1960s, their telecommunications systems, personnel and processes were heavily skewed against national development goals and instead, attuned in favour of external multinational and colonial objectives. Herbert Schiller describes this process, in its wider implications, as one of cultural imperialism, "by which a society is brought into the modern world system, and ... its dominating stratum ... attracted, pressured, forced and sometimes bribed into shaping social institutions to correspond to, or even promote, the values and structures of the dominating centre of the system." [Schiller 1976: 9].

The statistics of global communications disparity and acute sparcity of resources and facilities provided in reports from UNESCO, the World Bank and the International Telecommunications Union (ITU), map the contours of deprivation in the global south.

Reduced to a single statistic in the Caribbean telecommunications landscape, the scenario is one in which less than a dozen telephone lines are available for each 100 of the adult population across the region, with less than a quarter of this number existing in the rural areas [Cable and Wireless 1989: 1].

However, while an holistic approach does describe the historical and current global process of structural dependency, it does not disclose many of the internal contributory factors to such underdevelopment. As we noted with Sunkel in our earlier discussion of dependency, "the importance which is attributed to external conditions should not obscure the existence of internal conditioning structures." [Sunkel 1973: 14]. This assessment supports our own conclusion that in Caribbean telecommunications, besides the historically derived external influence, the role of internal actors and local circumstances also resulted in important negative consequences. The failure of regional and national planning authorities to agree on a common code for foreign direct investment, the absence of policy guidelines on technology transfer as well as outdated and inadequate regulatory mechanisms, have combined with genuine internal economic constraints to facilitate dependency and external dominance.

Our discussion of the internal aspect of this colonially derived economic duality accords with the analysis of Latin American development theorist, Anibal Pinto. In identifying the implications of this duality for domestic industrial policy, he argued that the uneven internal distribution of the fruits of technical progress accounted for an artificial limitation on the size of the domestic market. In Pinto's view , the disemmination of technical innovations, especially to the traditional agricultural sector, is one route to tackling the problem. He calls for far more balance in the allocation of government development funding between the urban and the traditional sectors, and for less discriminatory fiscal and foreign exchange policies against the agricultural sector. His approach is one of de-centralization of the tools and benefits of technical progress, enabling a wider industrial base for the production of capital goods and the development of a wider national market for consumer durables and for services such as telecommunications [Pinto 1965: 25].

The dependency and adverse colonial inheritance to which we refer in telecommunications terms, is re-inforced by the British political legacy of a state system modelled on Westminister and Whitehall, and unprepared to recommend or implement anything but incremental changes in policy. The economic and bureaucratic elites which dominate policy-making are able to interface easily with the external corporate inheritors of colonialism, such as Cable and Wireless.

Together, the local bureaucratic elites and the external multinational interests determine policy, because the mass of non-elites do not have an adequate grasp of the issues and the technical language which often disguises important social and political implications. The political representatives in the local ruling elite, subject to frequent changes, are also poorly equipped, and are therefore reactive and not proactive in policy formulation. By way of non-decisions or tacit endorsements, the policies of the ruling class are implemented or retained.

It is in this sense that the state, as suggested in the marxist model, is regarded as a facilitator of the interest of the dominant economic ruling classes. Applied to the Caribbean, this represents, in the first place, the protection of the interest of foreign capital. Because, as Samir Amin commented, the local state, unlike that in the metropole, serves as "the instrument of adjustment of local society to the demands of worldwide accumulation, whose changing directions are determined by changes at the centre. The difference explains why the central state is a strong state ...while the peripheral state is a weak state." [Amin 1990: 168].

In the industrialised global Centre, the state traditionally built up a more resilient relationship with internal interest organizations, especially those representing the large corporate sectors of capital accumulation. "The societies of central capitalism", according to Amin, "are characterised by the crystallization of a bourgeois national state, whose central role...is to control the conditions of accumulation through the national control it exercises over reproduction of labour power, the market, centralization of surplus, natural resources and technology. The state here fulfills the conditions of allowing 'autocentric accumulation', that is, subjection of...external relations to the logic of accumulation." [Amin 1990: 169-170].

Our research has shown that particularly in the period after 1850, the British state had begun to develop a strong directive relationship with the telegraph industry. While this resulted in early government takeover of the INTERNAL British telegraph network in 1868, the relationship between the state and the OVERSEAS private submarine telegraph operators remained, for the next eighty years, one based on mutual co-operation. Government negotiation, concessions and subsidies to the private operators were granted in return for some state control over global policy and major network decision-making.

This kind of mutually supportive state/company relationship, which we identify as emerging in the telecommunications industry from as early as the middle of the Nineteenth century, began to be described in the period after the Second World War as a process of Corporatism, in which the state and private industry assumed a mutually beneficial symbiotic relationship in the interest of the shared objective of capital accumulation and economic and political control.[See Schmitter 1974: 93-94; Grant 1985: 3-4; Cawson 1985: 8-13].In this relationship, according to one analyst, the state moves from a role of supporting capital accumulation to one of directing it [Ham and Hill 1984: 41].

The concept of corporatism, according to Cawson, combines the two key features of functional interest representation, and specific modes of state intervention. "It is the combination of these features that is the hallmark of corporatism" [Cawson 1985:8]. Cawson distinguishes between macro-level, societal corporatism, which sometimes takes the form of tripartism among state, capital and labour, and meso-level corporatism which "refers to the fusion of the processes of interest representation, decision-making and policy implementation with respect to a more restricted range of issues than the 'system steering' concerns of macro-corporatism". Its collective actors include 'sectoral associations of business interests', among others, possessing 'a logic of influence', and involving both 'opportunities and constraints' [Cawson 1985: 11].

These attributes of meso-corporatism were readily recognizable in the early submarine telegraph sector. Sectoral influence and interest representation were reflected in the early successful lobbying by the submarine telegraph industry against nationalization in 1868 and in 1928. In return, during this period, state direction was exercised through the leverage of subsidies, the granting of licences, technical and naval support, government telegraph contracts and, effectively, the overall co-ordination of private cable construction policy in the empire.

However, the merger between the cable and the wireless sectors of the industry which took place in 1928, marked the start of an erosion in the corporatist relationship which had so empowered imperialist network expansion during the previous century. It represented the strengthening of the state to a position of power out of keeping with the corporatist requirement of shared power between the main elements of the partnership [Grant 1985: 3]. An important contributory factor to this process of disproportional state influence was the pressure being exerted on the political Centre by the newly emerging independent-minded dominion governments of the empire.

Amalgamation of the industry into the single firm Cable and Wireless, altered the nature of the corporatist relationship, which temporarily changed from one of meso or industry-level corporatism to one of micro-corporatism between the state and a single firm. But by 1945, the company was nationalised, conveying total control to government and bringing to an end close to a century of voluntary interpenetration of the imperial state and corporate sectors in the telecommunications conquest of the peripheries of the British empire. In the first part of the period which followed, the company operated as a state-owned multinational corporation until its denationalization in 1981. Thereafter it entered its second phase of private multinational status.

It is against this background that we conclude that the early close corporatist relationship and later outright imperial state ownership, ensured for Cable and Wireless a consolidation of its monopoly hold on telecommunications markets in British colonial regions, such as the Caribbean, prior to independence. These historical conditions structured policy options in the sector in favour of the company and in line with the political requirements of the British imperial government and in the interest of the large British state bureaucracy which was supported by the company. Naturally, the advantages of traditional state support were among the major contributory factors to the company's global expansion and unbroken profitability in the decade since privatization.

This process, described by Girvan as one of 'corporate imperialism', strengthened the capacity of the imperial state to implement its economic and political objectives at home and overseas, in agreement with the leading capitalist interests [Girvan 1976 :11-12]. Despite the end of formal colonialism, the structural consequences and policy implications of close to a century and a half of imperialist control of the region's telecommunications, continue to be felt. British dominance of the sector was being maintained through the virtual monopoly by Cable and Wireless over Caribbean telecommunications. Whereas in the past, however, the Foreign and Colonial Office in London provided the political and diplomatic backing, we conclude that the company's current expansion in the region was being mediated through the policies of western multilateral lending agencies.

9.2 - SIGNIFICANCE OF THE EARLY CARIBBEAN NETWORKS

Our research has shown that the very establishment and the subsequent expansion of the Caribbean's telecommunications network were direct responses to the economic and political requirements of British industrial development and the empire-building objectives of the imperial centre.

Early British government support to the privately owned West India and Panama Telegraph Company (WIPTC) formed part of the extensive collaborative state/industry relationship in the sphere of telegraphy and telecommunications in general, dating back to the state sponsorship of the first successful 'private' submarine cable venture in 1850. The official justification for state support of these privately operated overseas telegraph schemes was provided in 1851 by the then British Foreign Secretary, Lord Palmerston, who noted that "the free use of continental electric telegraphs would be of great political advantage to Great Britain", for, among other things, "the rapid conveyance of intelligence of a political and military nature from China and from our Indian and other possessions." [From original letter of Lord Palmerston, July 4, 1851, in Public Records Office, Kew: File FO 97/197].

In line with this official view, the challenge of improved imperial control placed the vast Indian sub-continent among the first colonies to receive the internal telegraphic landlines and later the submarine cables linking directly to the control centre of the empire in London. "Communications", according to another representative of the Nineteenth century British imperial power structure, "are of the essence of our empire, and unless we succeed in solving some of the most urgent problems of more rapid communications, it will be almost impossible in the future to hold together this vast empire, scattered over the whole globe." [British General Smuts, in Wilshaw 1939: 107]. Innovations in telecommunications were, then, regarded as the critical underpinning of the British political, economic and military control of its colonial empire.

Once the technological watershed of establishing the transatlantic submarine cable was achieved in 1866, British political and commercial attention became focussed on the prospects of penetrating the markets of South and Central America, which were in 'danger' of American domination. The long-established colonies of the Caribbean, then declining in sugar production, seemed a ready-made beachhead for these ventures.

It is not surprising, therefore, that the privately-operated but heavily government financed company which spearheaded the inauguration of the first Caribbean telegraph cables, was called the West India and Panama Telegraph Company (WIPTC). Established on August 9, 1869, the WIPTC, while having some private American financing, was predominantly capitalised by British investors and controlled from London. [See U.K. Companies House File 00011116]. It succeeded in establishing the Caribbean's first direct telecommunications link with the United States and Britain in September 1870, with a stable commercial service in operation only in 1875. But, besides linking the British Caribbean territories into the transatlantic cable via Florida, the Company had the more ambitious objective of a linkage with Panama in Central America and then along the south west Pacific coast to Argentina and Montevideo in Uruguay, objectives which received the active financial support of the British government and many of the leading entrepreneurs.

We can conclude, therefore, that the initial linkage of the Caribbean region into the emerging global network, was a function of wider British economic and geo-political objectives. In addition to the advantages which the new cable connection would bring to the imperial Centre's task of remote political administration of the colonies, it appears that a major motive was also the prospect of increasing British multinational investment in Latin America. The inaugural West India and Panama Telegraph Company's cable link to the region was to be a modern means for the further incorporation of the Caribbean and Latin America into a new wave of British capital penetration, in competition with the emergent United States. For the dominant colonial elites in the Caribbean region itself, however, the cable link meant a reduction in their isolation from British society and in their insecurity as a privileged cultural and economic minority dominating a majority population of increasingly assertive black ex-slaves.

9.3 - THE C&W MULTINATIONAL: EMERGENCE AND DOMINANCE

In analysing large corporations and the control of the communications industries, Murdock identified two distinct but compatible approaches. One approach focusses the analysis on the actions of the key allocative controllers and personalities involved in the corporate decision-making process. The other concentrates on the economic and political structures determining corporate actions [Murdock 1982: 124]. Our analysis of the early emergence and overall development of Cable and Wireless as a multinational corporation finds support in Murdock's argument in favour of incorporating both approaches. "A structural analysis is necessary to map the range of actions open to allocative controllers and the pressures operating on them. But within these limits there is always a range of possibilities, and the choice between them is important and does have significant effects... To explain the direction and impact of these choices, however, we need an action approach which looks in detail at the biographies and interests of key allocative personnel and traces the consequences of their decisions for the organization and output of production." [Murdock 1982: 125].

Applied to our study, the structural approach enabled us to better appreciate the role of the parent state, Britain, as an important external influence on corporate policy within both the existing company and its antecedent forms. We have pointed out, for example, that the decisions of the 19th century British telegraph firms to avoid intersecting certain non-British territories with their early cable networks, flowed directly from the wider political constraints of imperial trade and investment policies. Yet within this, the flexibility for rapid growth and expansion of the sector relied heavily on the decisive role played by personalities such as the cable manufacturer and textiles magnate, John Pender and the wireless innovator, Guglielmo Marconi, and on their relationships with the state structure.

Cable and Wireless PLC represents the imposing end-product of this process of expansion and eventual merger between two 19th century corporate giants, led by these two personalities. Their actions, although dictated by the necessities of imperial state policy, were nontheless undertaken by Pender and Marconi as the foundation for their individual and joint corporate survival. The company which they helped to create in the process, became a potent symbol of close to a century and a half of British pre-eminence in global telecommunications, since the first successful submarine cable venture across the English Channel by Brett in 1850.

By 1887, according to Headrick, Britain controlled 70% of the world's submarine cables, with lines to the South Atlantic, the Caribbean, the Mediterranean, the Indian Ocean and the Pacific [Headrick 1988: 107]. The majority of companies operating this vast global network of cables, while registered as private commercial firms, were in reality sustained mainly by subsidies, subventions, contracts and technical support by the British government itself.

The passage of the Telegraph Purchase Bill implementing state acquisition of the entire British inland telegraph system in 1865, released from public resources 8-million in compensation to investors in private domestic telegraph companies. Much of these government resources were re-invested in overseas submarine telegraph ventures which were not then subject to a similar policy of state acquisition [Headrick 1988: 104]. For the very outset, therefore, the British state directly or indirectly provided the main financial support for 'private' overseas telegraph investment, which was to yield significant financial and political benefits for the shareholders and the political leadership of imperial Britain.

The financal advantages were spelt out in an article in the Times of London which declared in 1869 that : "There can be no doubt that the most popular outlet now for commercial enterprise is to be found in the construction of submarine lines of telegraph." [Times, August 26, 1869, in Barty-King 1969: 29]. In the political sphere, the advantages to empire of Britain's 19th century telecommunications pre-eminance were summarised in dramatic terms in an address to the Royal Colonial Institute in 1887, by a British Member of Parliament, J. Henniker Heaton. He viewed the imperial telecommunications network as the historically unique feature which would preserve Britain's colonial empire from the disintegration which was the fate of previous European empires.

> "Now it is often gloomily predicted by purblind students of history that this tremendous agglomeration must inevitably break up and dissolve, like its predecessors. 'Where,' they ask, 'are the Greek, the Roman, the Spanish, the Napoleonic Empires? What is

there in the British Empire to preserve it from the fate of these.' I venture to reply, that in the postal and telegraphic services, the Empire of our Queen possesses a cohesive force which was utterly lacking in former cases. Stronger than death-dealing warships, stronger than the might of devoted legions, stronger than wealth and genius of administration, stronger even, than the unswerving justice of Queen Victoria's rule, are the scraps of paper that are borne in myriads over the seas, and the two or three slender wires that connect the scattered parts of her realm." [Royal Colonial Institute, Proceedings 1887-88: 172, in Headrick 1988: 97-98]

Despite the historically inaccurate outcome of Heaton's optimistic predictions, his confidence in the telecommunications technology of the day is an indication of the political importance then ascribed to it. While unable to halt the inexorable march of political decolonization, the British imperial telecommunications network has survived, however, both as a profitable multinational corporation and a support mechanism for more modern structures of capitalist appropriation. Its Caribbean subsidiary, West India and Panama Telegraph Company, was re-named Cable and Wireless (West Indies) Limited in 1938, a name which it has since retained.

By 1945, the British state on whose behalf Heaton spoke, took full control of the Cable and Wireless parent company from its private sector operators. The political demands of a realm threatened by the forces of political de-colonization, temporarily superceded the immediate economic interests of the capitalist class. Following the Commonwealth Telegraph Conference of 1945, the large white dominions, including Canada, Australia, New Zealand and South Africa secured a measure of autonomy in the operation of their telecommunications services, which were to be operated as national systems separate from that of the empire. But the smaller, predominantly black colonies, including those of the Caribbean, remained under British colonialism. And control of their own telecommunications networks was denied to these colonies in favour of continued commercial dominance by the state-owned Cable and Wireless corporation.

In contrast with the large dominions operating closer to the imperial Centre, the Caribbean and other smaller colonies were, thus, assigned the status of the outer ring of the colonial periphery. Their economic and telecommunications future were the subject of only secondary considerations during the formulation of imperial policy after 1945. Divested of a role in the large dominions, Cable and Wireless was granted control of the systems in these regions as a concessionary prize, despite the appeal of some regional governments at the time for autonomous responsibility for their own telecommunications.

The uniform solution across the Caribbean region in the eyes of the leading Colonial Office technocrat was continued external control: "Generally", he commented, "I think that Cable and Wireless are in a better position to conduct the overseas radio telephone services of the colonies than the colonial governments... I think that there would be some advantage in having all the staff operating radio telephone services etc. in the West Indies under one body, so that the staff are interchangeable and visits by superintending officials can easily be arranged." [Memo of J.Megson, Colonial Office, July 14, 1944, in PRO File CO 937/3/4]. The view of this colonial official prevailed, and the future of Caribbean telecommunications was bound up with the future of the external, British company, Cable and Wireless.

It was a formula which engendered both an entrenched psychological and a protracted structural dependence on external inputs as a motive force for national and regional telecommunications development. Despite close to three decades of political independence, and over 120 years of Cable and Wireless operation in the region, the Caribbean continues to be increasingly dependent on the capital, technology and management expertise of the now privately owned Cable and Wireless company. Where the colonial Office managed to centrally organize the management of Caribbean telecommunications in a single company, Cable and Wireless, regional governments have failed since independence to create a technical institution with a broad regional scope capable of adequately regulating the sector.

9.4 - FOREIGN CONTROL AND THE MODERN CARIBBEAN NETWORKS

Despite the acquisition of political independence in the Caribbean starting in 1962, the neo-colonial significance of J. Henniker-Heaton's perception was underlined by one of the conclusions of a UNESCO study of communications in the region. According to the report of a UNESCO Research team in 1968, the British-owned "Cable and Wireless regional network represents the telecommunication lifeline of the Region." [Roppa and Clarke 1968: 73]. And, as we have already noted, a German broadcast specialist based in the Caribbean, Kristian Knaack, speaking a further twenty years after the UNESCO team, observed that, in the region, "If we talk about telecommunications policies and technologies, we talk Cable and Wireless." [Knaack 1989:39].

Our study has shown that in 1989, Cable and Wireless (West Indies) Limited maintained operations under franchise from the governments of 15 Caribbean territories. In 9 of these, or a majority of the regional territories, the company functioned as a monopoly in the provision of both domestic and overseas telecommunications services. In five other territories Cable and Wireless was the majority shareholder or managing partner in a unified national telecommunications entity, including a 79% equity ownership in in one of the region's largest companies, Telecommunications of Jamaica Limited (TOJ).

In addition, Cable and Wireless owns the central inter-island digital microwave transmission network and the main cable systems and satellite tranceivers into and out of the region. Its entry into regional information processing has grown into majority equity ownership of the data-processing and teleport facility called Jamaica Digiport International (JDI), and the company also has monopoly control of a similar but smaller teleport facility, and a television relay service, both in St Lucia.

Our interviews with senior Cable and Wireless directors and staff in the region indicated that while operational responsibilities were vested in a majority of Caribbean managers, allocational power and corporate policy-making was conducted at the company's headquarters in London. This profile of Cable and Wireless is consistent with our discussion in Chapter 4 of the tendency for MNCs to strive for wholly-owned subsidiaries over which they can exercise more decisive control over accumulation and intra-firm trade. Integration into data processing, teleport provisions and television programmes relay were also consistent with the efficiency and profitability objectives of MNC's. But so also is the company's concentration on the provision of urban-based services directed at the more profitable commercial and corporate sectors to the neglect of the less lucrative rural areas.

In these circumstances, numerous Caribbean government officials and members of the non-governmental community have voiced the importance of telecommunications for national development and regional integration. According to the Minister for Telecommunications in Antigua, it was vitally important that "telecommunications development is not allowed to be put under foreign monopoly control [CANTO Conference Proceedings 1989: 22]. And the former President of the Jamaica Telephone Company, Noel Ricards, noted that regional telecommunications systems were "extremely important and necessary for growth of a country", because of their key interlinkage and information distribution functions [Interview 26-10-89].

Caribbean Heads of Government, in their Kingston Declaration of July 1990, recognised the need for modern technologies to be deployed towards the internal development agenda of the region: "The strengthening of the knowledge base requires a major effort in the field of science and technology aimed at finding new and improved methods for utilizing the natural resource of the Region, and at adapting and utilizing state-of-the-art technologies in the production of goods and services." [in Demas: 1990:24]. And, the General Secretary of the Caribbean Conference of Churches, Allan Kirton, referring to the power and importance of modern communications technologies, urged that the people of the region should "join in the quest for a model of development which is non-exploitative and especially non-destructive of our culture..." [Kirton 1987: 4].

These Caribbean responses, affirming the importance of telecommunications and technology for regional and national development find support in a number of research studies which report a positive correlation between telecommunications availability and levels of productivity and economic growth [Jonscher 1985, 1987; Gille, 1985; Wellenius 1988]. Other researchers, such as Leff developed a specialised method of social-cost benefit analysis which sought to factor in the externalities which were inadequately taken into account in previous similar studies [Leff 1984].

Some analyses emphasised the substantial under-investment in telecommunications in Third World countries [Maitland Report, ITU 1984], and particularly in rural areas [Hudson 1984, Hills 1990]. Rural communities, which require more costly extensions to the network and which are viewed as less lucrative to private investment, were often neglected, in the same way that rural communities in the metropole, such as in Britain itself, were underserved. In the Caribbean context, the internal periphery of the region exists in the form of both the rural areas and the less developed countries themselves. Even if the neglect of rural communications in industrialised countries takes place to a lesser degree than in the periphery, relative conditions appear to accord with Galtung's conception of a correspondence of interest. Poor telecommunications provisions in rural areas of both developed and underdeveloped economies underline the priority placed by private network operators on urban centres as part of a global system of vertical interactions [Galtung 1981:

303].

Despite the extensively researched advantages of telecommunications for national development, other analysts have cautioned that applied to issues of integration and rural penetration, the concept is not an unproblematic one. According to Shields and Samarajiva, "The fact that integration detracts from the rights of rural communities to define their development priorities is ignored. For example, there is a very strong likelihood that improved two-way communication between the city and the hinterland may result in the ruin of local traders in the short term, and the incorporation of hitherto relatively self contained politico-economic entities in the long term [Shields and Samarajiva 1990: 205].

These key observations have to be taken into account particularly where, as in the Caribbean, the integration process involves sovereign states and valuable cultural variation. We have pointed out, however, that access to telecommunications can help rather that hinder rural communities in defining their own development priorities. At a regional level, we have also indicated the need to recognize that the integration process, by its very nature, involves trade-offs in the interest of wider collective benefits.

Our study has shown that despite verbal acknowledgement by governments of the importance of telecommunications in the process of Caribbean development, it continues to receive low governmental and intergovernmental priority. A number of regional projects aimed at harnessing the advantages of telecommunications for enhanced Caribbean interaction, education and development have encountered severe financial constraints. The University Distance Teaching Experiment (UWIDITE), the Caribbean News Agency (CANA) and the CARIBVISION Television Programmes Exchange Project all have in common both a heavy reliance on telecommunications as well as difficulties of adequate regional resourcing. Projects such as these would not fall within the commercial and income-generating remit of the private multinational regional carrier, Cable and Wireless, a fact which underlines an important disadvantage of private external control of the regional operating companies and the transmission network.

Recent divestments of government's majority equity interest in the national operating company in Jamaica, the granting of additional equity and management control in Trinidad and Tobago and increased holdings in St Lucia and Grenada have all occurred in favour of Cable and Wireless, and as part of a deliberate policy by the company to reinforce its long-standing presence in the Caribbean. Telecommunications liberalization programmes in the United States, as well as in Britain and Japan created new space for multinational corporations operating in the Third World to renew their drive for take-over of state telecommunications enterprises which were nationalised in the immediate aftermath of political de-colonization. But the recent strengthening of Cable and Wireless control in the Caribbean is also the result of two additional related factors. These are the massive increase in the debt burden and foreign exchange liability of regional countries and secondly the role of the multilateral lending agencies in enforcing the divestment demands of the western industrialised countries whose MNC's stand to benefit.

During the first two decades after the start of political decolonization in the Caribbean, the governments of the more developed territories, in response to the pressure of popular expectation, began to strengthen regional control over national resources. These measures included majority takeover foreign-owned telecommunications systems, which meant state and local private sector acquisition of a part of the monopoly shareholdings of Cable and Wireless. The company was entirely nationalised in Guyana, and in Jamaica, Barbados and Trinidad, equity acquisitions in the profitable overseas networks ranged from 40 % in Barbados to 51% in Trinidad and in Jamaica, where regulatory provisions were made for a programmed increase in national ownership. Such acquisitions and provisions were feasible propositions in the early 1970s when the basic technology of telecommunications was still a relatively stable body of knowledge which could be easily acquired and managed.

In the presentation of our research data, we have indicated however, that these initiatives encountered major reversals over the last decade. In Jamaica, where Cable and Wireless moved from a shareholding in TOJ of 9% in 1987 to 79% in 1990, the Minister of Telecommunications and Transport offered the following explanation for the latest tranche of sell-offs: "It had to do with foreign exchange constraints and of course the whole question of these companies being on the budget. The IMF watches these things very zealously. However, if the company is owned 51% otherwise than government, it is not regarded as a government entity...That was a consideration...You are trying to give yourself more room to do what you want to do... without having to answer too many questions to the IMF." [Interview: Pickersgill, 26/10/89].

We have outlined a similar set of circumstances in Trinidad and Tobago, where, in a single negotiation in 1989, 49% of the wholly-owned government telephone company was transferred to Cable and Wireless to complement a similar shareholding already held by the British company in the overseas carrier. Management and financial control to the loss-making local TELCO was also conceded, in the face of mounting national debt, foreign exchange shortage, and pressures for divestment from the International Monetary Fund [IMF].

In their analysis of the IMF, austerity and the state in Latin America, Petras and Brill have argued that intervention by the Fund and its accompanying incentives and contraints have altered the economic behaviour of social actors in favour of local and international finance capital at the expense of the local productive classes. "As an integral part of Western capitalism, the IMF has contributed toward re-structuring Third World economies, opening them to exports and flows of capital in periods of world expansion; extraction and transfer of surplus from the Third World to the West in times of debt crisis; and enforcement of economic obligations in times of declining income and worldwide economic contraction." [Petras and Brill 1986: 425].

It was clear that in both the Jamaica and Trinidad cases, the policies of the western multilateral lending agencies, in particular the IMF and the World Bank, have imposed loan agreements tied to programmes of divestment and privatization.
We conclude that in Caribbean telecommunications, these policies have favoured existing foreign interests, particularly Cable and Wireless with its long record of involvement in the region. The facilitative function which was historically performed by the imperialist state in the era of colonialism, is regarded in our analysis as being assumed in the modern period by these western multilateral agencies, in their mediating role on behalf of private capital between the centre and the periphery.

"The IMF does not act independently, nor does its symbolic representation as an international body signify anything less than a political economic instrument for Western capital. The IMF is a significant actor, but its effectiveness is based on the economic interests it represents and its capacity to fashion a policy which effectively defends those interests." [Petras and Brill 1986: 425]. In Caribbean telecommunications, the IMF and its counterpart, the World Bank, have performed exactly this role in the interest of foreign capital.

However, in addition to the pervasive consequences of such modern as well as more traditional forms of imperialism, we argue that a series of internal factors have also contributed to the situation of increasing external dominance over the region's telecommunications structures and policies. These factors include the absence of an adequately staffed regional institution for the co-ordination of telecommunications policy planning. Such institutional forms of regional co-operation and self reliance in telecommunications could have served to collectively mitigate some of the more unacceptable demands of the international capitalist system. The absence of established national and regional policies has contributed to pragmatic decisions which are uninformed by multi-sectoral analyses of the benefits and costs of telecommunications in Caribbean development, and of the need to retain national control while regulating the flow of foreign direct investment in the sector.

In addition, limited appreciation of the relevant technical and industry issues by both the wider public and the elected political leadership contributes to a strengthening of the local bureaucratic elites and the mostly expatriate technical personnel on whom governments rely for policy-making. The situation is compounded by an absence of a sufficient number of local personnel with the authority and expertise for bargaining in the areas of international technology transfer, equipment acquisition and trade in services. In addition, the failure to re-examine and revise out-dated regulatory policies and institutions, also number among the internal issues having a critical bearing on the regional telecommunications policy environment.

The corporate beneficiary of these internal deficiencies in planning, negotiation and policy regulation, as well as of the external policy impositions has, once again, been Cable and Wireless, which profited from similar circumstances during the era of colonialism.

However, during the last decade, increasing investment focus by American strategic planners associated with the Caribbean Basin Initiative (CBI) has encouraged competition from leading U.S. communications multinationals in the form of alternative transmission links such as the Trans Caribbean (TCS 1) fibre optic cable into and out of the region. In addition, British Telecom International (BTI) has begun to take an active interest in the region, wresting away from Cable and Wireless its age-old monopoly in Belize in 1988 and contesting, though unsuccessfully, Cable and Wireless' franchise in Trinidad and Tobago in 1989.

These recent developments could represent important threats to the protracted monopoly control by Cable and Wireless over the region's telecommunications system. But, such interventions and impending actions, while holding out the prospect of increased diversity within the region, would be nonetheless, a quantitative increase in external control. Without a regionally-based common strategy for the incorporation of telecommunications in Caribbean development planning, such additional competition and externally-generated policy initiatives could further enmesh the region in a wider net of dependency.

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APPENDIX

OUTLINE OF THE WORLD

On Mercator's Projection

CABLE NETWORK

FIG. I.

London Published at the Admiralty 1st Jan. 1932 under the Superintendence of Vice Admiral H P Douglas C B C M G Hydrographer

OUTLINE OF THE WORLD

On Mercator's Projection

WIRELESS NETWORK

FIG. 3.

London Published at the Admiralty 1^st Jan 1932 under the Superintendence of Vice Admiral H P Douglas C B C M G *Hydrographer*